USER MANUAL

IPD Xedio Plugin

Version 6.70 - August 2015

IP.Director

Xedio.CleanEdit

Disclaimer

This manual and the information contained herein are the sole property of EVS Broadcast Equipment SA and/or its affiliates (EVS) and are provided “as is” without any expressed or implied warranties, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. In particular, EVS makes no warranty regarding the use or the consequences of use of this manual and the information contained herein. Furthermore, EVS may not be held liable for any direct or indirect, incidental, punitive or consequential loss, damage, cost or expense of any kind whatsoever and howsoever resulting from the normal or abnormal use of this manual and the information contained herein, even if advised of the possibility of such loss, damage, cost or expense.

While every effort has been made to ensure that the information contained in this manual is accurate, up-to-date and reliable, EVS cannot be held liable for inaccuracies or errors that may appear in this publication. The information in this manual is furnished for informational purpose and use only and subject to change without notice.

This manual cancels and replaces any previous versions thereof.

Copyright

Copyright © 2012-2015 EVS Broadcast Equipment SA. All rights reserved.

This manual may not be reproduced, transcribed, stored (in a database or an retrieval system), translated into any language, computer language, transmitted in any form or by any means – electronically, mechanically, printed, photocopied, optically, manually or otherwise – in whole or in part without the prior written consent of EVS.

Trademarks

All product and brand names are registered trademarks and trademarks of EVS or of their respective owners.

Improvement Requests

Your comments will help us improve the quality of the user documentation. Please send improvement requests, or report any error or inaccuracy on this user manual by e-mail to doc@evs.com.

Regional Contacts

You will find the full list of addresses and phone numbers on the following webpage: http://www.evs.com/contacts.

User Manuals on EVS Website

The latest version of the user manual, if any, and other user manuals on EVS products can be found on the EVS download center, on the following webpage: http://www.evs.com/downloadcenter.

Table of Contents

TABLE OF CONTENTS III

WHAT'S NEW? IX

1. INTRODUCTION 1

1.1. Purpose 1
1.2. General Description 1
1.3. Prerequisites 1
1.4. Starting IPD Xedio Plugin 2

2. USER INTERFACE 3

2.1. Overview of the Main Window 3
2.2. Tree View 5
2.3. Search Pane 8
2.4. Elements Grid 9
2.4.1. Introduction 9
2.4.2. Grid Header Contextual Menu 9
2.4.3. Sorting the Elements in the Grid 10
2.4.4. Organizing Columns 10
2.5. Status Bar 12
2.5.1. Message Pane 12
2.5.2. Monitoring the Transfer Status 13
2.6. Tabs in the Work Area 15

3. THE BASICS 16

3.1. Introduction 16
3.2. Finding Media 16
3.3. Creating an Edit 17
3.4. Creating Sub-Clips from Clips 18
3.5. Placing Clips onto the Timeline 20
3.6. Checking the Edit 22
3.7. Playing out the Edit 24
3.7.1. Introduction 24
3.7.2. Playout Process from the Playout Tab 24

4. IMPORTING MEDIA 26

4.1. Purpose 26
4.2. Importable Media 26

5. SEARCHING FOR MEDIA 27

5.1. Filtering Tools 27
5.2. Branch Selection in the Tree 27
5.3. Quick Text Search 27
5.3.1. Purpose and Context of Use 27
5.3.2. Search for Synonyms 28
5.3.3. Quick Text Search Field Display 28
5.3.4. Quick Text Search Syntax Rules 28
5.3.5. Autocomplete Function in Quick Text Search Field 29
5.4. Advanced Search 32
5.4.1. Purpose and Context of Use 32
5.4.2. Advanced Search Fields Display 32
5.4.3. Advanced Search Fields Types 33
5.4.4. How to Clear an Applied Advanced Search Filter 34
5.4.5. Search in Free Text Fields 34
5.4.6. Search in Non-Free Text Fields 35
5.5. Using Saved Filters 44
5.5.1. Introduction 44
5.5.2. How to Save Filters 45
5.5.3. How to Apply a Saved Filter 45
5.5.4. How to Delete a Saved Filter 45

6. MANAGING MEDIA ITEMS 46

6.1. Pane Bins Area 46
6.2. Managing Clips 47
6.2.1. Description 47
6.2.2. Possible Actions on Clips 50
6.3. Managing Playlists 52
6.3.1. Description 52
6.3.2. Possible Actions on Playlists 52
6.3.3. Converting a Playlist to Edit 53
6.4. Managing Edits 54
6.4.1. Description 54
6.4.2. Possible Actions on Edits 54
6.4.3. Creating an Edit 56
6.5. Managing Bins 58
6.5.1. Description 58
6.5.2. Bin Contextual Menu 58
6.5.3. Bin Element Contextual menu 59
6.6. Managing Logs 60
6.6.1. Description 60
6.6.2. Log Directory and Logsheet Management 62
6.6.3. Possible Actions on Logs and Clips from Logs 63

7. MAIN WORKSPACE FOR EDITING 64

7.1. Edit Tab Overview 64
7.2. Player Pane 65
7.2.1. Overview 65
7.2.2. Activating the Player Area 68
7.2.3. Making the Player Area Full Screen 68
7.2.4. Video Display Options 68
7.2.5. Loading Media onto the Player Area 69
7.2.6. Moving Within Media Loaded on the Player Area 69
7.2.7. Creating and Working with Clips in the Player 74
7.2.8. Selecting the Tracks to be Added to the Timeline 79
7.2.9. Adding Logs to the Media Loaded on the Player Area 82
7.3. Recorder Pane 86
7.3.1. Overview 86
7.3.2. Activating the Recorder Area 88
7.3.3. Making the Recorder Area Full Screen 88
7.3.4. Adjusting the Recorder Video Display 89
7.3.5. Playing the Edit in the Recorder Pane 89
7.3.6. Selecting the Monitored Audio Track for an Edit 92
7.3.7. Checking the Edit in the Recorder Pane 92
7.4. Audio Meters / Trim Pane 93
7.4.1. Introduction 93
7.4.2. Audio Meters 93
7.5. Timeline Pane 95
7.5.1. Overview 95
7.5.2. Timecode Bar 97
7.5.3. Scale Bar and Move Bar 97
7.5.4. Reference Positions on the Timeline Display 98
7.5.5. Timeline Element on the Timeline Display 99
7.5.6. Color Representation on the Timeline Display 100
7.5.7. Contextual Menus for Timeline Elements 101
7.5.8. Timecode and Duration Fields 105
7.5.9. Audio Track Selection and Settings in the Timeline 107
7.5.10. Editing Buttons in the Timeline Area 114

8. GENERAL EDITING 118

8.1. Marking Positions on the Timeline 118
8.1.1. Adding Marks 118
8.1.2. Adding Mark IN and Mark OUT Over Several Elements 119
8.1.3. Removing Marks 119
8.2. Selecting Techniques 119
8.2.1. Selecting a Clip 119
8.2.2. Selecting Elements Depending on Nowline or Mark Positions 120
8.3. Placing Clips onto the Timeline 121

8.3.1. Introduction 121
8.3.2. Important Prerequisites 121
8.3.3. Tools to Easily Position Clips in the Timeline 123
8.3.4. Placing Clips in an Edit Depending on the Requested Position 124
8.3.5. Add a Clip To Fill in a Blank Area in the Timeline 126
8.4. Moving Clips or Elements on the Timeline 128
8.4.1. Moving a Clip or Element in the Timeline 128
8.4.2. Moving an Audio Clip between Tracks without Modifying its Horizontal Position 129
8.5. Replacing Clips by Linked Clips 130
8.6. Deleting Clips or Elements From the Timeline 130
8.6.1. Deletion Methods 130
8.6.2. Deletion Modes 131
8.6.3. Deleting Portions of an Edit 131
8.6.4. Deleting Timeline Elements 132
8.7. Tidying Up and Organizing the Edit 134
8.7.1. Resynchronizing Associated Clip Elements 134
8.7.2. Removing Blank Areas on a Timeline 135
8.7.3. Aligning Elements on a Reference Element 136
8.7.4. Splitting an Element in the Timeline 136
8.7.5. Grouping Elements in a Sync Group 137
8.8. Cue Points 138
8.8.1. Introduction 138
8.8.2. How To Add Cue Points 139
8.8.3. How To Go to and Select Cue Points 139
8.8.4. Contextual Menu for Cue Points 140
8.9. Extending or Shortening Clips 140
8.9.1. Introduction 140
8.9.2. Extend Modes 141
8.9.3. Extending or Shortening a Clip 141
8.9.4. Extending a Clip with a Still Frame 144
8.9.5. Extending or Shortening a Clip by Modifying its Speed 145
8.10. Creating Fast Motion Clips 146
8.10.1. Various Ways to Create Fast Motion Clips 146
8.10.2. Modifying the Playback Speed of a Clip Using the Speed Command 146
8.10.3. Rendering Fast Motion Clips 147
8.11. Trimming Edit Points on the Timeline 148
8.11.1. Definition and Access to Trim Area 148
8.11.2. Overview on the Trim Functions 148
8.11.3. Trimming or Rolling Around the Clip Transition 149
8.11.4. Rolling a Clip 151
8.11.5. Retrieving the Source of an Edited Image 152

9. ADVANCED VIDEO EDITING 153

9.1. Introduction 153

9.2. Video Transition Effects 153
9.2.1. Ways to Add Video Transition Effects 153
9.2.2. How to Modify the Default Video Transition Effect 154
9.2.3. How to Apply Video Transition Effects Manually 155
9.2.4. Possible Video Transition Effects 156
9.2.5. Removing Transition Effects 161
9.2.6. Inserting Blocks of Color Frames 161
9.3. Video Clip Effects 162
9.3.1. Introduction 162
9.3.2. How to Apply a Video Clip Effect 163
9.3.3. Simple Video Clip Effects 164
9.3.4. Video Clip Effects With Key Frames 166
9.3.5. Adding Key Frames for an Effect 169
9.3.6. Copying and Pasting Video Clip Effects 172
9.4. Conversion Effects 173
9.4.1. Introduction 173
9.4.2. Changing the Mode for the Conversion Type 173

10. ADVANCED AUDIO EDITING 175

10.1. Overall Audio Track Settings 175
10.2. Audio Transition Effects 175
10.2.1. Ways to Add Audio Transition Effects 175
10.2.2. Adding Automatically Default Audio Transition Effects 176
10.2.3. Modifying the Automatic Default Transition Effect 176
10.2.4. Possible Audio Transition Effects 176
10.2.5. Adding Audio Transition Effects on Elements of the Same Track 179
10.2.6. Adding Audio Transition Effects on Elements of the Same Clip 181
10.2.7. Adjusting Audio Transitions 183
10.2.8. Removing Audio Transitions 183
10.3. Audio Routing, Swaps and Mutes 183
10.3.1. Default and Specific Audio Routing 183
10.3.2. Possible Audio Channel Functions 184
10.3.3. Copying and Pasting Audio Routing Actions 185
10.4. Audio Level Adjustments 186
10.4.1. Introduction 186
10.4.2. How to Adjust the Audio Level on a Single Clip 186
10.4.3. How to Adjust the Overall Level of a Track 187
10.5. Miscellaneous Audio Features 188
10.5.1. How to Generate the Waveform of an Audio Element 188
10.5.2. How to Remove an Audio Waveform 190
10.5.3. How to Duplicate an Audio Track 190

11. VOICEOVER, LOGO, GRAPHICS, TEXT OR SUBTITLES 192

11.1. Adding Voiceover 192

11.1.1. Introduction 192
11.1.2. Voiceover Tab Overview 193
11.1.3. Voiceover Process 195
11.2. Adding a Logo or Graphic 199
11.2.1. Introduction 199
11.2.2. Tag Manager Window 199
11.2.3. Possible Actions on Tags 202
11.2.4. Inserting a Logo or Graphic 202
11.2.5. Inserting a ORAD Graphic within the Edit 204
11.2.6. Moving Tag Points 207
11.2.7. Duplicating a Tag 208
11.2.8. Deleting Tags 208
11.3. Adding Integrated Text and Graphics or Subtitles 209
11.3.1. Introduction 209
11.3.2. Text Tab Overview 210
11.3.3. Defining the Area to Insert Text/Graphics 211
11.3.4. Adding Text and Graphics to the Edit 212
11.3.5. Working with Template of Text and Graphics 218
11.3.6. Applying a Transition Effect to the CG Area 219
11.3.7. Checking the Integrated Text and Graphics 219
11.3.8. Importing a Subtitle File 220
11.3.9. Editing the Character Generator Page Properties 223

12. HEADER MAKER 225

12.1. Introduction 225
12.2. Header Maker Tab Overview 226
12.3. Operations 227

13. FINAL STAGES IN THE EDITING PROCESS 228

13.1. Checking the Edit 228
13.2. Playing Out an Edit 229
13.2.1. Introduction 229
13.2.2. Playout Process from the Playout Tab 229
13.2.3. Playout Tab 230

14. APPENDIX 1 – SHUTTLEPRO 233

15. APPENDIX 2 – KEYBOARD SHORTCUTS 234

16. APPENDIX 3 – DIGIGRAM HARDWARE SETTINGS 235

What's New?

In the user manual, the icon NEW ! has been added on the left margin to highlight information on new and updated features.

The following sections have been updated to reflect changes brought to Xedio Suite 4.60.

Support of 12-channels Multicam mode

IPD Xedio Plugin can be used with an EVS server configured with 12 channels.

- See section "Replacing Clips by Linked Clips" on page 130.
- See section "Overview" on page 65 ("Player Pane").

1. Introduction

1.1. Purpose

The purpose of the IPD Xedio plugin is to integrate a file based editing system, Xedio CleanEdit, with the IPDirector world. The users will be able to use IPDirector content for editing with CleanEdit. This content must previously be shared on nearlines between IPDirector and Xedio. This includes A/V files, audio files, stills and logos.

1.2. General Description

Xedio CleanEdit is a non-linear editing system enabling journalists to edit stories in standard and high-definition. As soon as the editor is back in the newsroom, the edit can be shared through this integrated news production system.

The IPD Xedio plugin is an Activex embedded in the Xedio CleanEdit installshield. When it is installed on a workstation, opening CleanEdit will automatically display the version with the IPD Xedio plugin.

The IPDGateway service subscribes to IPDirector API notifications. When a clip is created within IPDirector, the IPDGateway communicates with IPDirector to get all the information and references the new clip in the Xedio database.

Note
Xedio CleanEdit can work with high resolution and low resolution media. There is no restriction on the resolution of the low resolution media.
The default video resolution for proxy video browsing, editing and encoding is specified in the Software parameters > General > General tab in Xedio Manager.

1.3. Prerequisites

- Users must have been created in IPDirector User Manager and in Xedio Manager with the same username and password.
- A nearline must have been created in IPDirector Remote Installer and declared on the Xedio Media Server from Xedio Manager.

1.4. Starting IPD Xedio Plugin

To start the IPD Xedio plugin application, select the CleanEdit application from **Start > Programs > EVS Boroadcast Equipment** or click on the **CleanEdit** icon on the desktop:

The Xedio workstation may be integrated into an Active Directory domain. In this case, IPD Xedio Plugin will automatically open without requesting additional access codes when the user starts it.

The user group the user belongs to in the Windows domain must be linked to a user role in Xedio Manager. This determines the set of user rights and user settings the user will have in the application. In case a user belongs to several Windows groups, the system retrieve them in alphabetical order and checks whether the first group matches a user role. The use of Windows authentication must have been enabled in Xedio Manager. See the Xedio Manager user manual for more information.

In case the auto-log off mode is activated and the Windows authentication by Active Directory mode is used, the auto-log off becomes an auto-quit function.

If the Xedio workstation is not integrated into an Active Directory domain, a login screen will display, where users have to enter their own IPD Xedio Plugin username and password.

Note
The system administrator creates login names and passwords in the Xedio Manager application. Please refer to that product user manual for more details.

2. User Interface

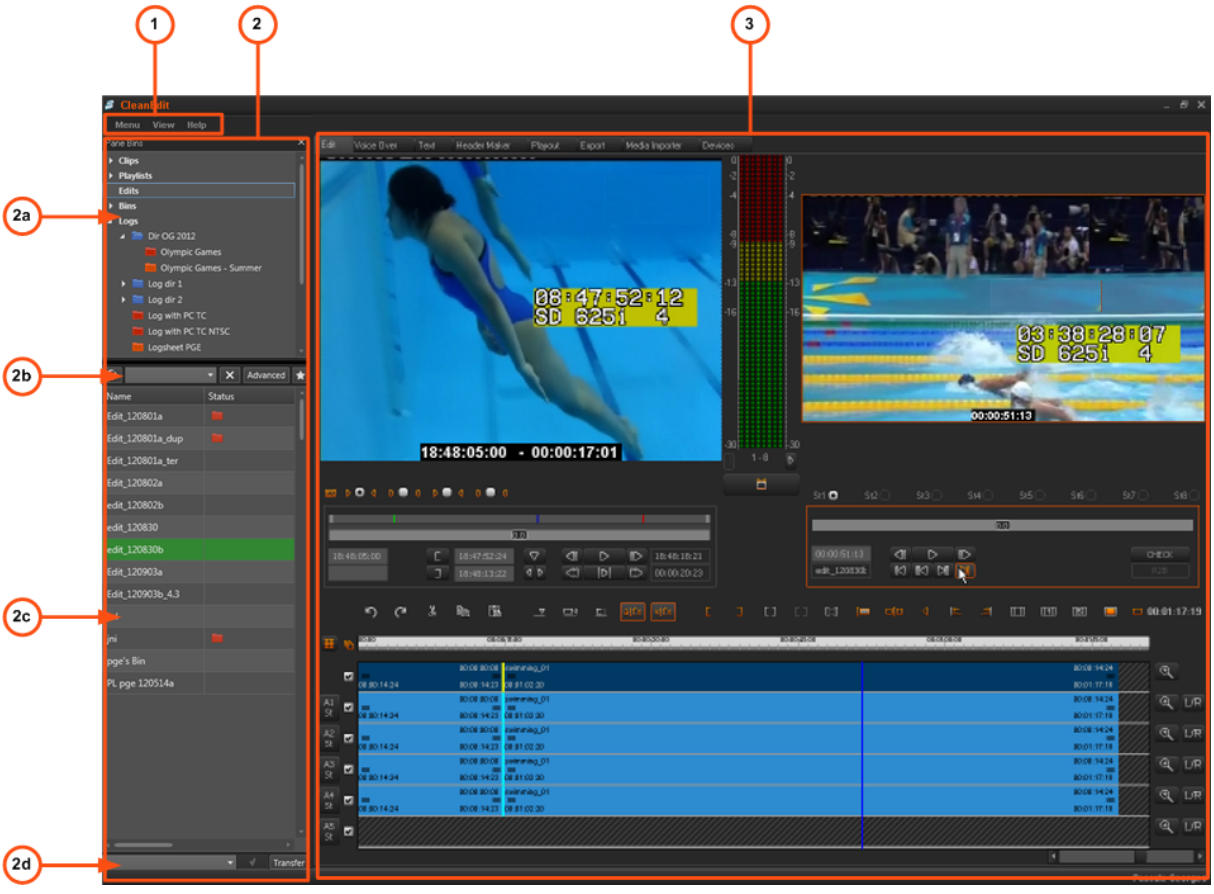
2.1. Overview of the Main Window

General Description

The window combines a reduced IPDirector Database Explorer giving access to the shared content on the left, and CleanEdit tabs useful for the editing process on the right.

Illustration

The window which displays at opening contains the main areas highlighted on the following screenshot.



Description of the Parts

The table below describes the various parts of the IPD Xedio plugin window:

Part	Name	Description
1.	Menu bar	The Menu bar gives access to several commands to exit the application, to hide or display the Pane Bins area, or to get information on the application version.
2.	Pane Bins area	The left hand part of the interface displays some user interface elements from the IPDirector Database Explorer. Its function is to permit the user to manage the available media, multiple edits, and clips and media used in the edits. It is divided in several parts listed hereafter.
2.a	Tree view	The Tree view shows the different branches from the IPDirector Database Explorer which can be used to filter items in the Elements grid: clips, playlists, edits, bins, logs. See section "Tree View" on page 5.
2.b	Search pane	The Search pane provides several tools to perform quick text search or advanced search, to save applied filters and recall them later on. See section "Search Pane" on page 8.
2.c	Elements grid	The Elements grid displays all the items included in the selected tree branch or resulting from a search. See section "Elements Grid" on page 9.
2.d	Status bar	The Status bar contains: • a **Message** field which provides a quick display of the information, warning and error messages generated in the current session. • a **Transfer** button which opens the Transfer Monitoring window providing detailed information on the items transfers. See section "Status Bar" on page 12.
3.	Work area	The Work area has tabs for the modes that the user could be working in, such as timeline or voiceover modes used in the edit process, or other modes which are for other areas of the CleanEdit workflow, from media ingest and import, to playout as video, or rendering a completed edit to one specific format for the use of another system. See section "Tabs in the Work Area" on page 15 for a brief description of each available tab.

Note
The color of some user interface elements may vary with the Xedio skin installed.

2.2. Tree View

Introduction

The tree view allows browsing and performing search in the IPDirector database and nearline storage. Clicking the arrow next to a tree branch expands it. The selected branch content is displayed in the Elements grid.

Contextual menus are available when right-clicking some of the Tree view elements. See section "Managing Media Items" on page 46 for a description of their options.

Tree View Elements

The current section mentions which items are displayed in the Elements grid based on the tree branch selected.

Clips

Selecting this branch displays, in the Elements grid, the list of clips present in the database and on the nearline storages.

It also lists the record trains from the servers present on the XNet.

Only the elements present on a nearline created from the IPDirector Remote Installer and declared in the Xedio Media server can be used with the IPD Xedio plugin. Clips can be A/V files, audio files, stills, logos and CG templates for use with the Character Generator tool.

Playlists

Selecting this branch displays, in the Elements grid, all the playlists present in the IPDirector database.

Sub-branches list the on-line and off-line playlists separately but only off-line playlists can be used with the IPD Xedio plugin.

Edits

Selecting this branch displays, in the Elements grid, all the edits present in the IPDirector database.

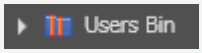
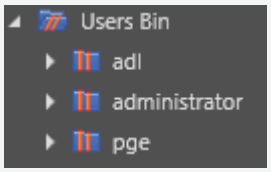
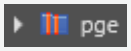
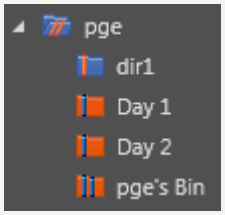
Edits may have been created from the IPD Xedio Plugin, the Director's Cut module of IPDirector or the IPBrowse application. They can also be created by the IPMosGateway NRCS systems as Autocreate placeholders.

Edits can only be modified from the CleanEdit interface.

Bins

Selecting this branch displays, in the Elements grid, all the clips which are in bins and bin directories.

Expanding the Bins view shows the bins and bin directories in the Tree view, as detailed in the table below:

Tree Branch / Sub-Branch	Description
	Bin Directory: shows all the elements which are in all the bins and directories under the selected directory.
	Bin: shows all the elements which are in the selected bin.
	Bin set as default bin.
	**Users Bin Directory**: shows all the elements which are under all the System [User] bin directories. This directory is created by the system when an IPBrowse license is found in the database. It is visible by all the users but no one can modify, delete or publish it, nor add a bin or bin directory directly under this directory. Expanding the Users Bin Directory view displays the System [User] bin directories for all the users: 
	**System [User] Bin Directory**: shows all the elements which are in the bins and bin directories for the selected user. Expanding a System [User] Bin Directory view displays all the bins and bin directories for the selected user (here: pge). Its name contains the user logging ID.  This directory is created by the system. It is visible by all the users but only the owner of the directory and an administrator can modify, delete or publish it, or add a bin or bin directory directly under this directory.
	System [User] Bin created by the system for the selected user. Its name contains the user logging ID. It shows all the elements put in it by the selected user. It is visible by all the users but only the owner of the bin and an administrator can modify, delete or publish it, or move this bin.
	[User] Bin: created by the selected user under its System [User] bin directory. It shows all the elements put in it by the selected user.

Tree Branch / Sub-Branch	Description
	Default [User] Bin: bin created by the selected user under its System [User] bin directory and set as default bin. It shows all the elements put in it by the selected user.
	[User] Bin Directory: created by the selected user under its System [User] bin directory. It shows all the elements put in it by the selected user.

Logs

Selecting this branch displays, in the Elements grid, all the logs present in the IPDirector database.

Expanding the **Logs** view shows the log sheets and log directories in the Tree view, as detailed in the table below:

Tree Branch / Sub-Branch	Description
	Log Directory: shows all the logs from all the log sheets which are in the selected directory.
	Log Sheet: shows all the logs which are in the selected log sheet.
	Log sheet of which **all** the logs are **protected**.
	Log sheet of which **some** of the logs are **protected**.
	Log sheet of which **none** of the logs is **protected**.
	Log sheet which has been **de-activated**.

2.3. Search Pane

Description

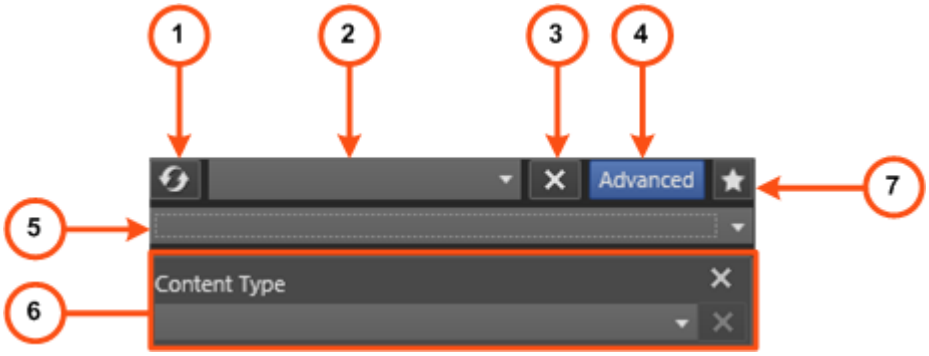
The Search pane provides several tools to perform quick text search or advanced search, to save applied filters and recall them later on.

Illustration

The Search pane displays as follows:

Clicking the **Advanced** button expands the panel as follows:

When search criteria have been selected, the panel contains the areas highlighted on the following screenshot and shortly described in the table below.



Description of the Parts

The table below describes the various parts of the Search pane:

Part	Name	Description
1.	Refresh button	Refreshes the Elements grid.
2.	Quick Text Search field	Used to perform a search on free text. See section "Quick Text Search" on page 27.
3.	Clear All button	Clears all the applied searches, quick text search and/or advanced search.
4.	Advanced button	Clicking the **Advanced** button displays the **Add Search Criteria** field. Then, advanced search functions are available for detailed search operations on metadata. See section "Advanced Search" on page 32.

Part	Name	Description
5.	Add Search Criteria field	Selecting a parameter from the **Add Search Criteria** drop-down list give access to an advanced search area for this parameter. See section "Advanced Search" on page 32.
6.	Advanced Search area for selected parameters	An advanced search area is displayed between the Search panel and the Elements grid for each parameter selected from the **Add Search Criteria** field. See section "Advanced Search" on page 32 for more information on the different types of advanced search fields and how to perform an advanced search.
7.	Favorites button (or Saved Filters button)	The **Saved Filters** button gives access to a menu which allows the users to save the applied filter for later use and then apply the same set of filters with a single click. See section "Using Saved Filters" on page 44.

2.4. Elements Grid

2.4.1. Introduction

The Elements grid represents the content of the tree branch selected in the Tree view. It can also returns the result of a search applied with a filtering tool to the elements of a selected branch of the Tree view.

In the grid, elements are presented in rows and all their associated parameters and metadata are in columns.

2.4.2. Grid Header Contextual Menu

Right-clicking the grid header displays the grid contextual menu.

The options are described in the following table:

Option	Description
Hide	Hides the selected column.
Organize	The Select Columns window opens and allows the users to select the columns to display and their order.
Save grid organization	Saves the organization of the grid as it is displayed (columns selection, order and size). It is saved by each user. Therefore, this organization will be retained the next time the user logs in and opens the application.
Reset grid organization	Sets back the grid to the default grid organization.

2.4.3. Sorting the Elements in the Grid

At start of the application, items are sorted with most recent on top.

You can change the sort order of elements in the grid by clicking the column header for the parameter according to which you want to sort the elements.

The column header which is used for sorting is highlighted in blue. The little triangle indicates the sorting order. Clicking the column header again changes the sorting order from ascending to descending or vice versa.

2.4.4. Organizing Columns

Columns can be resized and/or re-ordered. This new organization is automatically saved and remembered. However, it is also possible to reset the column organization to the default organization.

Resizing Columns

A column can be resized by using the mouse pointer over columns intersection and dragging it to the right or to the left.

Selecting Columns to Display

To select the columns to display in the grid, proceed as follows:

1. Right-click the column header area.

   A menu is displayed.

2. Select **Organize**.

   The Select Columns window opens and the right pane shows the list of columns in the current order.

3. To select the column(s) you wish to add to the view, do one of the following actions:
   - in the left pane, double-click the column(s) you wish to add to the view
   - select them in the left pane and click the right arrow
   - drag them onto the Visible Columns area.

   Use **CTRL + click** to select a list of non-contiguous columns.

   Use **SHIFT + click** to select a list of contiguous columns.

4. To select the column(s) you wish to remove from the view, do one of the following actions:
   - on the right pane, double-click the column(s) you wish to remove from the view
   - select them on the right pane and click the left arrow
   - drag them onto the left pane.

Use **CTRL + click** to select a list of non-contiguous columns.

Use **SHIFT + click** to select a list of contiguous columns.

5. Click **OK**.

Ordering Columns

To change the columns order, proceed in one of the following ways:

Select a column header and drag it to the left or right to the required place:

OR

1. Right-click the column header area.

   A menu is displayed.

2. Select **Organize**.

   The Select Columns window opens and the right pane shows the list of columns in the current order.

3. Drag the selected column to the required position in the Visible Columns pane.
4. Click **OK**.

Resetting the Column Organization to the Default One

Users can reset the column organization to the default one (columns selection, order, size,...). This will be done for all types of items at once.

To do so, proceed as follows:

1. Right-click the column headers area.
2. Select **Reset Grid Organization**.

Resetting the List of Columns back to the Default One

Users can reset the list of columns displayed in the grid to the default one. This will be done only for the type of items currently selected from the Tree view.

To do so, proceed as follows:

1. Right-click the column header area.

   A menu is displayed.

2. Select **Organize**.

   The Select Columns window opens.

3. Click **Back to Default**.

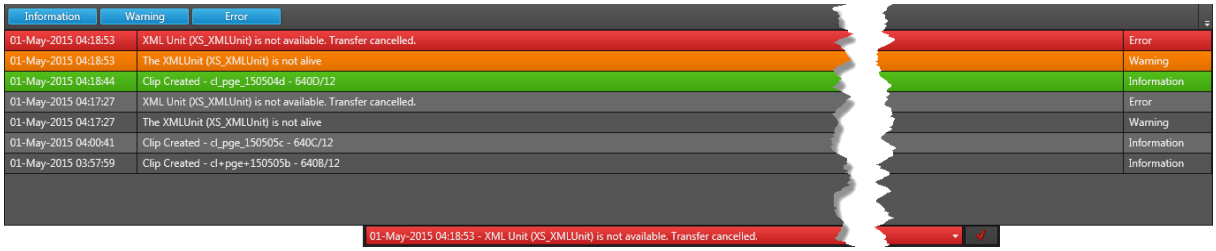
2.5. Status Bar

2.5.1. Message Pane

Purpose

The **Message** field displays the most recent message in the Status bar.

The Message panel expands by clicking the **arrow** on the right of the **Message** field. It provides a quick display of the information, warning and error messages generated during the current session.


Information
Warning
Error
01-May-2015 04:18:53 XML Unit (XS_XMLUnit) is not available. Transfer cancelled. Error
01-May-2015 04:18:53 The XMLUnit (XS_XMLUnit) is not alive Warning
01-May-2015 04:18:44 Clip Created - cl_pge_150504d - 640D/12 Information
01-May-2015 04:17:27 XML Unit (XS_XMLUnit) is not available. Transfer cancelled. Error
01-May-2015 04:17:27 The XMLUnit (XS_XMLUnit) is not alive Warning
01-May-2015 04:00:41 Clip Created - cl_pge_150505c - 640C/12 Information
01-May-2015 03:57:59 Clip Created - cl+pge+150505b - 640B/12 Information
01-May-2015 04:18:53 - XML Unit (XS_XMLUnit) is not available. Transfer cancelled.

Messages Display

The messages include the following information:

- the date and time when the message was generated
- the message itself

The messages are highlighted on a different background color depending on the type of message.

- An information message is highlighted in green.
- A warning message is highlighted in orange.
- An error message is highlighted in red.

Message Acknowledgment

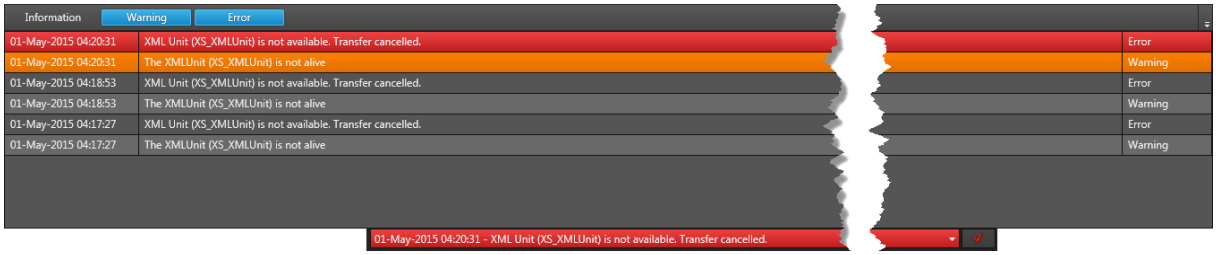
As soon as a message appears, the **Acknowledge** button turns red.

Users can acknowledge the message by clicking the button. This changes the background of the message to gray.

This helps the users to distinguish the messages that have been dealt with from the ones that have not.

Messages Filter

Messages can be filtered according to their type thanks to the **Message Type** buttons displayed on the top left corner of the expanded **Message** field: **Information**, **Warning**, **Error**.



By default, all the filters are enabled and all the buttons have a blue background.

To disable a filter and remove the corresponding messages from the list, users must click the **Message Type** button for that filter. The button is then displayed on a gray background.

2.5.2. Monitoring the Transfer Status

Purpose

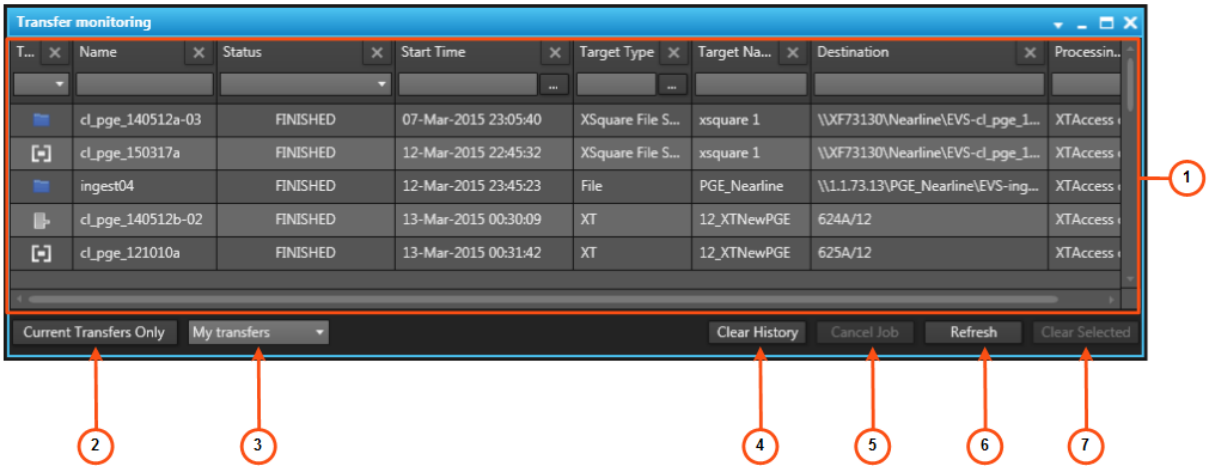
The Transfer Monitoring window provides detailed information on the clips, playlists, edits or timelines transfers, would they be scheduled, on-going, finished or failed.

Accessing the Transfer Status Information

Information on the transfer status is available by clicking the **Transfer** button from the Status bar.

Illustration

The Transfer Monitoring window contains the areas highlighted on the following screenshot:



Area Description

The table below describes the various parts of the Transfer Monitoring window:

Part	Name	Description
1.	Transfer Jobs grid	Transfer jobs are presented in rows and all their associated parameters and metadata are in columns. Filters are available from fields displayed above each column and allow searches on a specific column of the grid.
2.	Current Transfer Only	This button gives access to the list of transfers currently in progress and scheduled. Its background is colored when it is enabled: Current Transfer Only To go back to the list of all the transfers, click the **Current Transfers Only** button again.
3.	My Transfers / All Transfers option list	**My Transfers**: this option only shows the transfers initiated by the logged user. **All Transfers**: this option shows all the transfers initiated by all the users. It is only available for administrators / media managers or users with appropriate user rights.
4.	Clear History	This button removes all the transfers jobs from the list.
5.	Cancel Job	This button cancels the selected transfer job. It is available for transfers currently in progress.

Part	Name	Description
6.	Refresh	This button allows users to manually refresh the view at a point in time. Otherwise, the system automatically refreshes the view.
7.	Clear Selected	This button removes the selected transfer job from the list.

2.6. Tabs in the Work Area

The number of tabs displayed in the Work Area depends on options purchased, which allows the customers to have a system customized to their requirements and avoid working modes that are not needed in their workflow. In addition, the display of each tab can be enabled or disabled in Xedio Manager.

Any tab in the Work area is automatically selected by placing the mouse over a tab at the top of the Work area until the tab becomes visible or by clicking the tab.

The table below gives a brief explanation of each tab.

Tab Name	Description
Edit	The Edit tab is the main workspace for working and finalizing an edit. Sub-clips and edits are created in this tab. It contains a Player area, an Audiometers area and a trim area, a Timeline area and a Recorder area.
Voice Over	This tab is entirely dedicated to the recording of voiceover on a specific audio track over one or several parts of the edit.
Text	The Text tab gives access to the Character Generator tool. This tool allows the users to place text anywhere on the video image and to combine it with a graphics layer. The combination of text and graphics can be saved as template which can then be re-used later.
Header Maker	The Header Maker tab provides a tool to insert a still clip at the beginning of an edit. This still is created automatically and is based on information defined in a XML file.
Playout	This tab is used to playout an edit, a clip, a log or a log sheet.
Media Importer	Through the Media Importer tab, authorized users may import media that have already been recorded and are in file format.

3. The Basics

3.1. Introduction

This part will guide you through a simple workflow for the IPD Xedio Plugin application to produce a simple edit, and either play it out from the application or create a standard file for use or playout by another system.

The steps are:

1. "Starting IPD Xedio Plugin" on page 2
2. "Finding Media" on page 16
3. "Creating an Edit" on page 17.
4. "Creating Sub-Clips from Clips" on page 18
5. See section "Placing Clips onto the Timeline" on page 20.
6. See section "Checking the Edit" on page 22.
7. "Playing out the Edit" on page 24 .

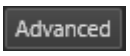
Each step is described at its most basic only using on screen controls. Any keyboard shortcuts, which could be used, will be detailed in the following chapters.

The edit created using the techniques in this chapter will be video with associated audio clips only and edited with a cut as the transition.

3.2. Finding Media

To be usable in the IPD Xedio plugin, clips must exist in file format, shown with a icon (high resolution) or a icon (low resolution) in the Elements grid, and be stored in a nearline known by IPDirector and the Xedio media server.

Selecting a branch in the Tree view limits the list of results to the corresponding item types in the Elements grid: clips, playlists, edits or logs.

The Search Panel provides a **Quick text search** field to perform a search on a free text string. It also gives access, from the 

button, to Advanced Search area to apply filters on a specific type of metadata. See section "Searching for Media" on page 27 for detailed information on how to use those functions.

An applied filter can be saved for later use via the button. Such a saved filter can then be applied very easily later on from the same button.

3.3. Creating an Edit

You first need to create a new edit or open an existing edit before you can add media to the timeline related to a given edit, or add effects on the timeline.

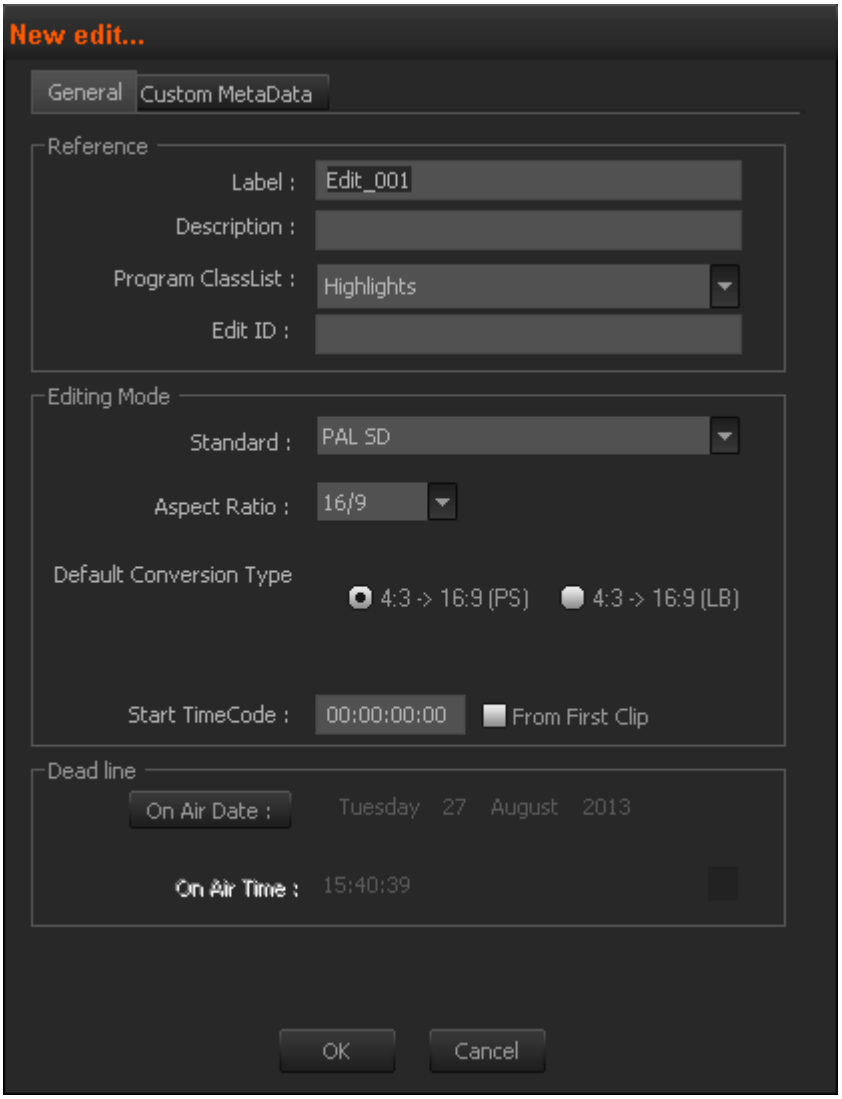
Right-clicking in the Edit node of the tree view opens a contextual menu. When you select **New Edit** in this menu, a New Edit dialog box is displayed, which allows you to create a new edit.

You need to enter a name. A description and other metadata can be saved with the edit definition into the database. You will find detailed information on the fields in the New Edit window, in the section "Creating an Edit" on page 56.

When you validate the new edit definition by clicking **OK**, the edit characteristics are recorded in the database.

When an edit is active (open), its name is displayed in dark green in the Elements grid and the timeline buttons are enabled.

Then, you will be able to add media to the edit.



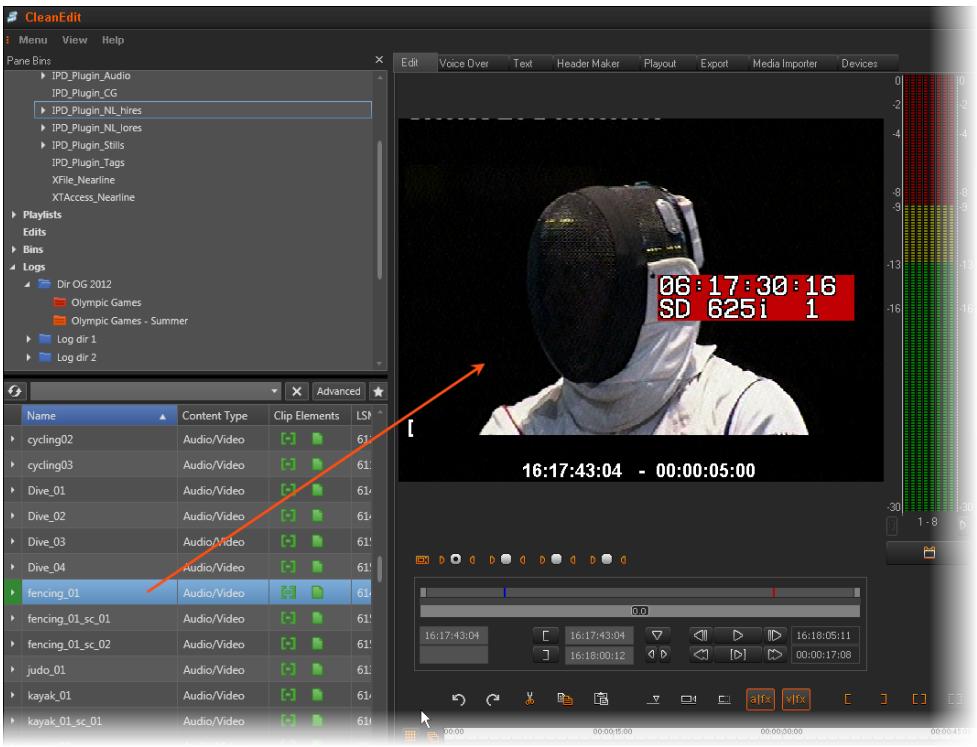
3.4. Creating Sub-Clips from Clips

Sub-clips can be created from clips (on the nearline or in bins), Protect Media clips and Associated clips (from logsheets).

To mark sub-clips from a clip, it is necessary to view the clip in the Player window on the Edit tab.

Once you are in the Edit tab, proceed as follows to view the clip and mark sections for inclusion on the timeline:

1. Select the requested clip from the Pane Bins area and double-click on it or drag it to the Player window. It will open in the Player window.

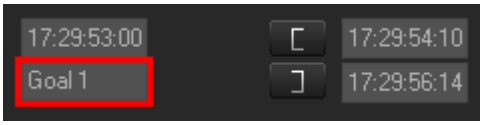


2. Play the media using
   - the transport controls on the panel,

   - the keyboard shortcuts or
   - the optional remote control panel (ShuttlePRO).
3. Mark an IN point by clicking on the button on the panel.
4. Mark an OUT point by clicking on the button on the panel.

   The duration of the clip will then be displayed.

5. Optionally, add a name for the clip in the text field.

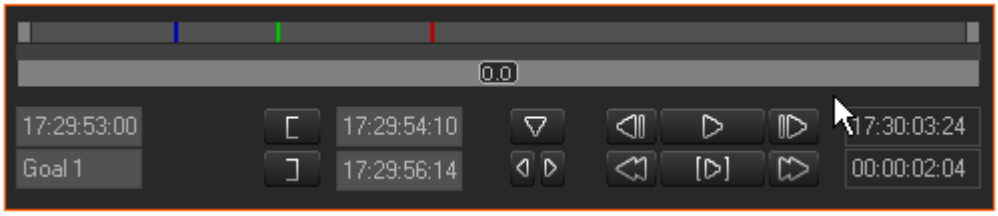


6. Optionally, save the clip in a bin by dragging it from the Player to the bin in the Tree view.

   The Save Clip window opens to enter metadata.

   Keeping the **CTRL** pressed while dragging the clip does not open the Save Clip window. The clip is then saved with the name entered in step 5.

You want to …	You need to …
Add the clip to the database, but not to the timeline.	Drag the clip to a bin without activating the Fill button .
Add the media to the database, and place it at the end of the timeline.	Activate the **Fill** button, then drag the clip to a bin.



The top area represents the whole length of the original media.

The current position within the clip is shown by a blue marker.

The IN point is displayed below the Player window as a green marker.

The OUT point will be represented by a red marker line.

See section "Overview" on page 65 for more information on these items.

Note
IN and OUT points can be moved by selecting the marks on the media bar and dragging them to the required position, or by typing directly the timecode in the fields besides the mark IN and mark OUT buttons.

3.5. Placing Clips onto the Timeline

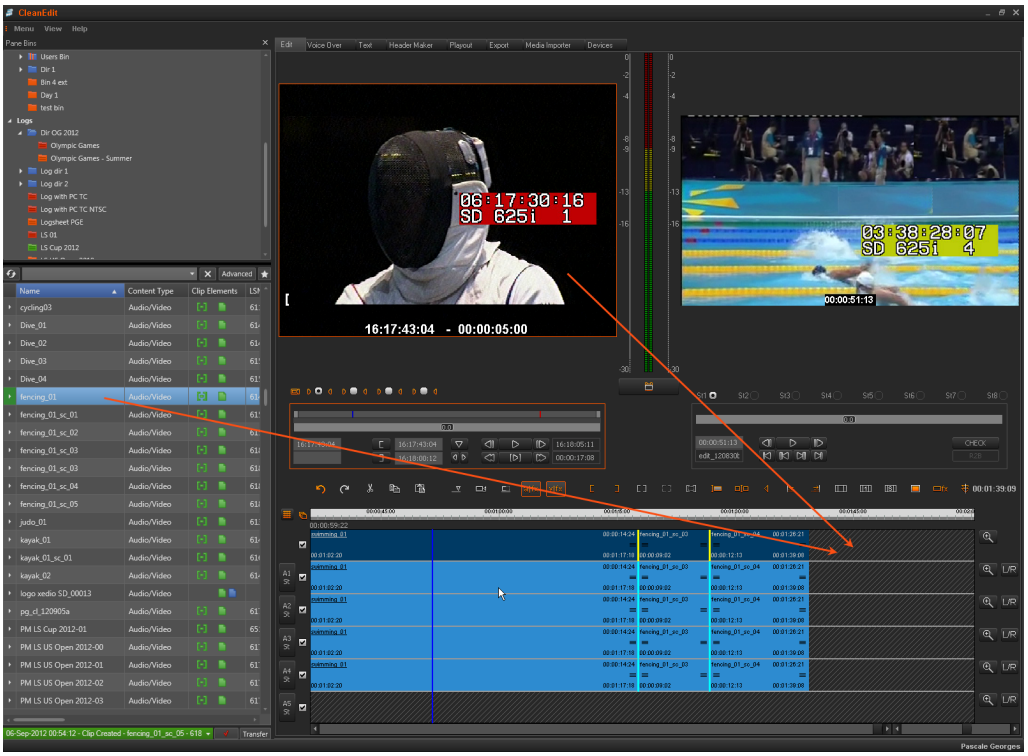
Introduction

There are many different ways to add clips onto your edit. The main methods for placing a clip to your edit are one of the following:

- Dragging the clip into a bin when the **Fill** button (next to the Editing buttons in the timeline area) is active.

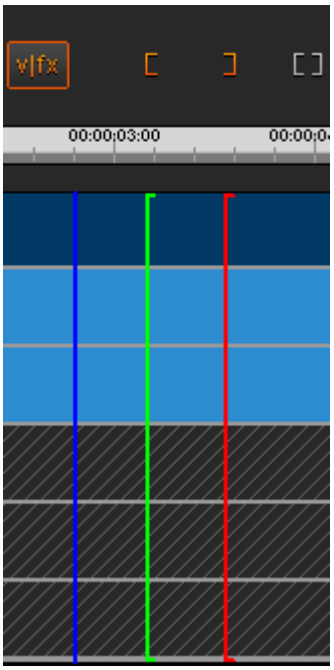
  This adds the clip to the end of the timeline.
- Dragging the clip from the Elements grid to a given position in the edit.
- Dragging the clip from the Player to a given position in the edit.

You will find comprehensive information on the various ways to place clips into an edit in the section "Placing Clips onto the Timeline" on page 121.



Marking Position on the Timeline

Using the buttons displayed on the screenshot below, you can mark points to edit accurately on the timeline. You can use these marks to place your clips into the timeline.



The following marks can be defined in the timeline:

Name	Description	To define the mark, …
Nowline	Blue vertical line, which displays the current position on the timeline.	click on the timeline ruler where you want to place the nowline.
Mark IN	Green vertical line, which displays the position of a mark IN point.	place the nowline at the requested position and click the **Mark IN** button .
Mark OUT	Red vertical line, which displays the position of a mark OUT point.	place the nowline at the requested position and click the **Mark OUT** button .

Mode to Place the Clip onto the Timeline

Before you drag a clip onto the timeline, you need to define the way you want to insert it. Two modes are available: **Overwrite** or **Insert**.

You select the mode by clicking the **Overwrite/Insert Mode** button, which allows the user to toggle the mode.

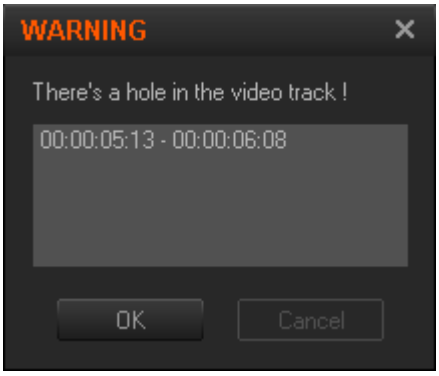
Mode		Description
Overwrite (default)	(white)	Adds the media in the timeline, overwriting the existing media from the selected position. In other words, the media in the timeline will be removed from the insertion point by the duration of the added media.
Insert	(colored)	Adds the media in the timeline without overwriting existing media and pushes further right the existing elements of the timeline placed after this position. In this mode, you can only insert the media on the clip boundaries which are common to all selected tracks.

3.6. Checking the Edit

When the edit is completed it is possible to check it. Xedio CleanEdit parses the timeline for possible errors (lack of video, for example) or missing hi-res files (if this has been set in Xedio Manager).

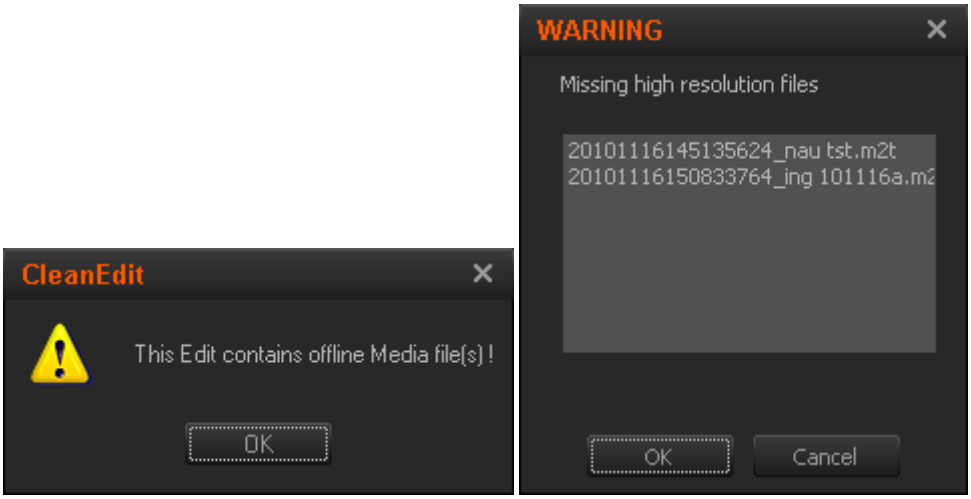
To do so, click the **CHECK** button.

- If a hole is discovered, a dialogue box opens and gives a time reference on the timeline for where there is no video.



In this case, the **R2B** button will not become available.

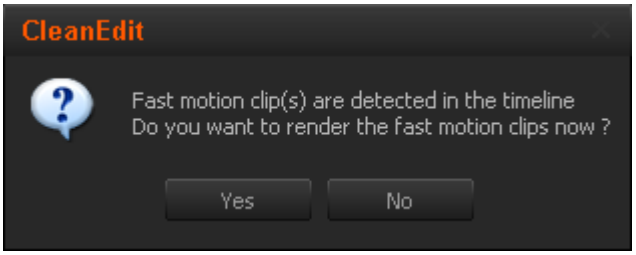
- If missing high resolution files are discovered, a dialogue box opens and gives the list of missing files.



  In this case, the **R2B** button becomes available as soon as you click **OK** to acknowledge the message.

  A icon is displayed on each low resolution file on the timeline.

- If a fast motion clip is detected, a dialogue box opens via which you can render the fast motion clip(s). The transcoding codec used for the rendering of a fast motion clip is set in Xedio Manager.



  If you choose **No**:

  - The **CHECK** button remains enabled, since not-rendered fast motion clips are still present in the edit.
  - The **R2B** (ready to broadcast) button remains disabled.

If the edit is checked successfully, the **CHECK** button will be disabled and the **R2B** (ready to broadcast) button will be enabled. See section "Checking the Edit in the Recorder Pane" on page 92.

3.7. Playing out the Edit

3.7.1. Introduction

Playing out an edit consists of "outputting" the edit straight to an SDI connection. The playout option is therefore available only on workstations equipped with an EVS SDI output board (PCX2 or PCX3).

You can play out an edit from two different "locations":

- from the IPD Xedio plugin application, via the Playout tab.

  You use such a solution when you want to playout some edits individually.

  This section will cover the playout from Playout tab.

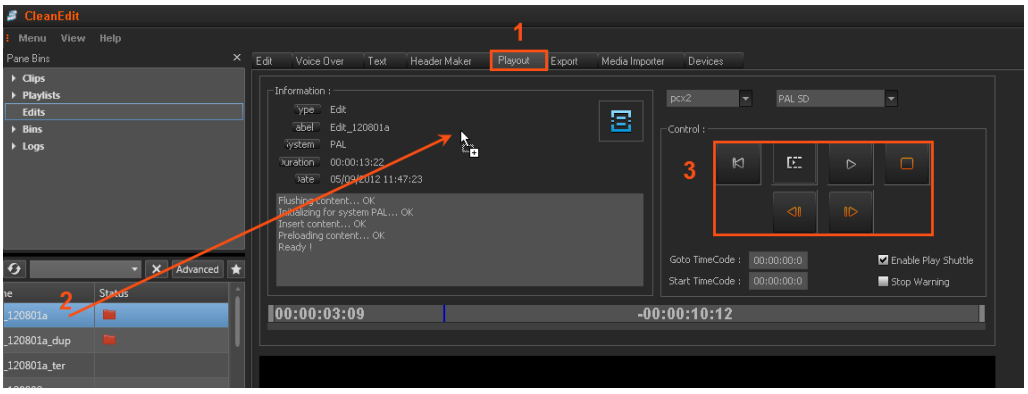
- from the Xedio Playout Organizer.

  You use such a solution when you want to manage several edits in your playout, and/or when a dedicated playout server is installed on your setup.

  This section is covered in the Xedio Playout Organizer user manual.

Both playout solutions cannot be used at the same time on the same machine because they would both try to attach to the EVS SDI output board (PCX2 or PCX3).

3.7.2. Playout Process from the Playout Tab



Activating the Playout tab

Move the mouse pointer over the Playout tab.

Preloading the edit

You can play an edit whether it is ready to broadcast or not.

To preload the edit for the playout, select the edit from the Edit Elements grid in the Pane Bins area and drag it anywhere onto the Playout tab work area.

The edit is ready to be played out.

Playing the edit

To play the edit, you can directly use the usual control commands available on the right part of the window.

See section "Playout Tab" on page 230 for more information on the Playout tab.

4. Importing Media

4.1. Purpose

In IPD Xedio Plugin, the Media Importer tool offers a way of acquiring media files for use within the system. Authorized users may import, into the Xedio database, media that have already been recorded and are in a file format that can be used by Xedio.

Once the files are imported and set to "Publish", they become available in the Media Manager.

The Media Importer tool is available as:

- a separate application: Xedio Importer
- a module built in IPD Xedio plugin, and available in the Media Importer tab.
- a module built in Xedio Manager, and available in the Media category.

Note
The color of some user interface elements may vary with the Xedio skin installed.

4.2. Importable Media

When you click the **Media Importer** tab, the Media Importer window is displayed in the work area, allowing you to select media to import.

Different tabs can be displayed, provided that they have been selected from Xedio Manager: **Softwares > Parameter Profiles**.

They are used to set the parameters for the different types of media which can be imported into the system:

- **Video/Audio/Stills tab**: to import media files, images or audio files
- **RTD tab**: to import video containing transitions

Refer to the Xedio Importer user manual for a comprehensive description of the tabs and fields.

5. Searching for Media

5.1. Filtering Tools

When the database contains large amounts of data, it may become difficult to find a specific element. The Pane Bins area offers several ways to refine the list of elements displayed in the Element grid and speed up your search:

- Branch selection in the Tree view - Select a branch in the Tree view to limit the list to specific item types or only a subset of the Tree view.
- Quick text search in the Search pane - Enter free text in the **Quick Text Search** field to perform a search on a specific string.
- Advanced search filter in the Search pane – Enter specific criteria to perform a search on specific metadata associated with the elements.

A search can also be facilitated by ordering the Elements grid. See section "Elements Grid" on page 9 for more information.

5.2. Branch Selection in the Tree

The Tree view allows the users to browse and perform search in the database and the nearline. By browsing the tree structure, a selection is made and displayed in the Element grid.

When other search tools (Quick Text Search, Grid Filters or Saved Filters) are already applied, these are then limited to the selected branch.

See section "Tree View" on page 5 for a description of the user interface elements of the Tree view.

5.3. Quick Text Search

5.3.1. Purpose and Context of Use

The Quick Text Search function is used to perform a search based on free text entered in the **Quick Text Search** field. This field is available on the top of the Elements grid:

See section "Search Pane" on page 8 for the description of the buttons associated to the **Quick Text Search** field.

Users can enter a search string in one of the following ways.

- Entering the search string in full in the **Quick Text Search** field.
- Clicking the arrow next to the **Quick Text Search** field, so the last 10 searches are displayed, and then selecting one of them. See section "Quick Text Search Field Display" on page 28.
- Starting to type a search string in the **Quick Text Search** field, so the Autocomplete function displays a list of proposals, and one of them can be selected. See section "Autocomplete Function in Quick Text Search Field" on page 29.

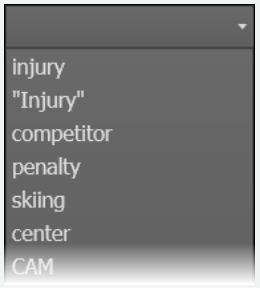
5.3.2. Search for Synonyms

Users have the possibility to perform a search for word synonyms, provided that they have been defined in the database thesaurus file and that the corresponding option has been set in the IPDirector General setting **Freetext searches behavior**.

Then, a search performed with a search string will return the predefined synonyms as well. This function can be used to search for translated words.

5.3.3. Quick Text Search Field Display

The following table shows the various displays for the **Quick Text Search** field, and what they mean:

Display	Meaning
	The field background is gray: No Quick Text Search is applied nor entered.
	The field background is red: The user is typing or has typed a search string, but has not applied it yet, or a search has been applied but the user has typed another search string in the field and not applied it yet.
	The field background is green: The user has applied the search string, by pressing **ENTER**. The result of the Quick Text Search is displayed in the grid.
	The down arrow next to the **Quick Text Search** field gives access to the last 10 searched strings.

5.3.4. Quick Text Search Syntax Rules

The Quick Text Search option obeys specific rules.

The string that you enter in the **Quick Text Search** field is analyzed according to the following set of rules:

Search String	Search Result	Logical Equivalent
Yellow card	Searches for the words yellow and card, even if in two different fields (columns), for example yellow in Name and card in Keywords. For example a clip named "The Yellow Man" with keywords "Red Card" will be found, since it has yellow and card in 2 different fields.	"Yellow" AND "card"
Yellow | card	Searches for yellow or card, even if in two different fields (columns), for example yellow in Name or card in Keywords.	"Yellow" OR "card"
"Yellow card"	Searches for exact matches of Yellow card. Between the quotes, all characters are considered as characters and not operators or wildcards.	"Yellow card"
card*	Searches for card at the beginning of a word.	"card"*
card	Searches for all words that include card.	*"card"*
=card	Searches for a whole field that contains only card. For example, if a field contains yellow card, the =card condition will not return any result.	

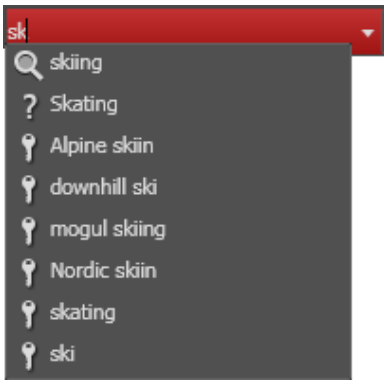
Search operators may be combined.

5.3.5. Autocomplete Function in Quick Text Search Field

Introduction

The Autocomplete function is a help service for the capture of the search string.

As soon as the users start typing in the **Quick Text Search** field, the Autocomplete function provides a list of matching words and sentences known by the system and containing a word beginning with the typed letters.



Result Types in the Autocomplete List

The list displayed below the **Quick Text Search** field is made up of different types of results, as described in the following table.

Icon	**Description:** **The line displays the result corresponding to the typed letters and …**
	… coming from the **local search history**. Several lines can be displayed, the most recent are shown on the top of the list.
	… coming from the **100 most popular searches** asked to the system since its startup, and launched from the same tree branch. Several lines can be displayed, the most frequent are shown on the top of the list.
	… coming from an **index of words** entered in text fields, such as item name, item source name, item VarID, tape ID, item metadata text. Keywords are not indexed in this list. Several lines can be displayed, sorted alphabetically.
	… corresponding to a **keyword** from a keyword list.
	… corresponding to a **participant** from a keyword list.

The proposals made in the Autocomplete list for the local search, popular search and indexed words depend on the tree branch selected at the time when a word is typed. For example, if the Logs view is selected in the tree view, only the searches performed on the Logs view will be proposed, as well as indexed words attached to logs.

Proposed keywords and participants are not linked to the selected tree branch.

How to Perform a Quick Text Search with the Autocomplete Function

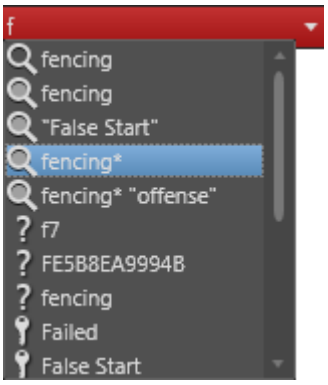
Search on One String of Characters

To perform a Quick Text search, proceed as follows:

1. Select the tree branch you wish to perform a quick search on.

2. Type a search string in the **Quick Text Search** field.

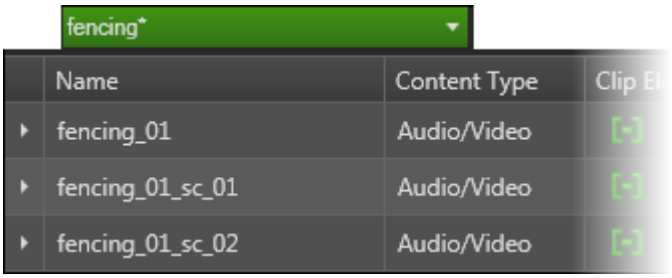
   A list of proposals is displayed as soon as you start to type and it is refined as you go on typing.

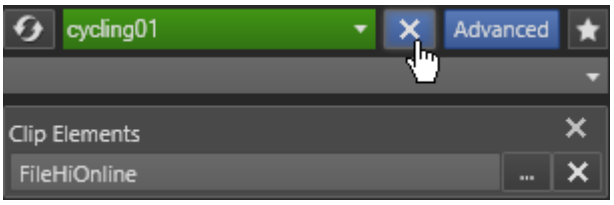


3. Select a line by using the mouse or the key.
4. Press **ENTER**.

   The search is launched with the selected proposal.

   The search results are displayed in the grid.





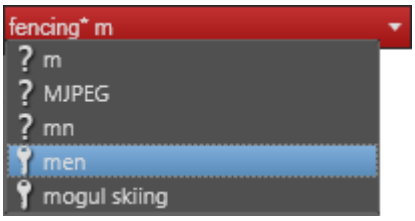
Search on Two Strings of Characters

To perform a search based on two words, proceed as follows:

1. Follow steps 1 to 4 from the previous procedure.
2. Press **Space bar** and then start to type a second word.

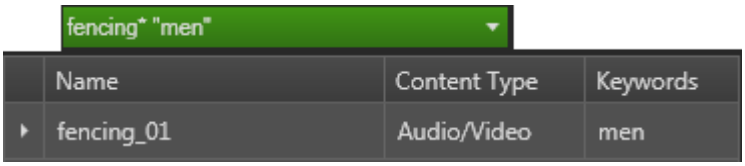
   A new list of proposals is displayed based on the second word.

3. Select a line by using the mouse or the ↓ key.



4. Press **ENTER**.

   The search is launched with the two selected proposals .



5.4. Advanced Search

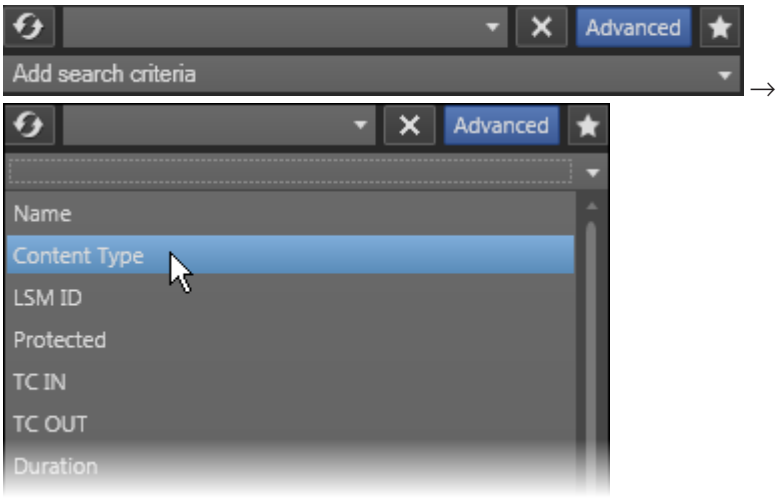
5.4.1. Purpose and Context of Use

The Advanced Search functions are available for more detailed search operations. They allow searches on a specific column of the grid.

5.4.2. Advanced Search Fields Display

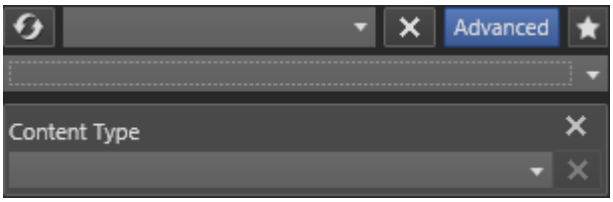
Displaying Advanced Search Fields

The list of available advanced search parameters is available by clicking the Advanced button and then the arrow next to the **Add Search Criteria** field.



Depending on the media type (clips or logs) selected in the Tree view, different lists of advanced search parameters are proposed.

To display an advanced search parameter, select one of the options from the **Add Search Criteria** menu. The selected parameter is displayed in the Advanced Search pane.



Hiding Advanced Search Fields

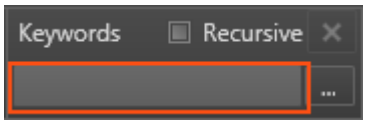
To hide an advanced search filter, click the **X** button at the upper right corner of the Advanced Search Filter area.

5.4.3. Advanced Search Fields Types

Different types of advanced search fields exist:

- free text fields: search data can be entered directly in these fields.
  - in most of the cases, no button is available next to the field, e.g. **Name** field.

  - Keywords and Participants search fields

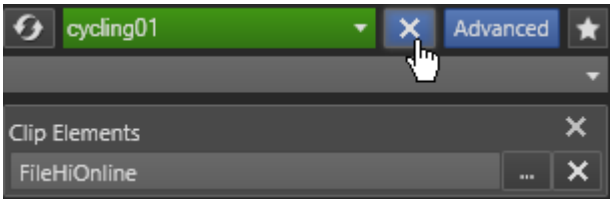
- field with an option list: an arrow giving access to a list of options is available on the right of the field , e.g. **Level** field.

- field with a complex filter button to the right of the field giving access to a Select Filter Condition window to define specific search values, e.g. **Date** field, **Keywords** field,…

5.4.4. How to Clear an Applied Advanced Search Filter

To clear a filter applied on an advanced search criterion, click the **X** button next to the corresponding criterion:

When filters have been applied from several search tools, all the filters can be cleared by clicking the **Clear All** button next to the **Quick Text Search** field:



5.4.5. Search in Free Text Fields

Autocomplete Function in Free Text Search Fields

The Autocomplete function is a help service for the capture of the search string. The Autocomplete function, described in section "Autocomplete Function in Quick Text Search Field" on page 29 for the Quick Text Search, is also enabled during searches in free text search fields of the Advanced Search area.

The Autocomplete list, displayed under free text search fields of the Advanced Search filters, is limited compared to the one shown under the **Quick Text Search** field. No local search or popular search will be proposed.

- Only indexed words will be listed under free text fields other than **Keywords** or **Participants** fields.
- Only keywords will be listed under the **Keywords** field.
- Only participants keywords will be listed under the **Participants** field.

Free Text Search Syntax Rules

The string that you enter in the **free text search** field is analyzed according to the same set of rules as for the Quick Text Search. See section "Quick Text Search Syntax Rules" on page 28 for details on these rules.

Preliminary Steps

1. Select the tree branch in the Tree view.

2. Click the **Advanced** button

   The **Add Search Criteria** field displays.

3. From the **Add Search Criteria** drop-down list, select a parameter such as **Name**.

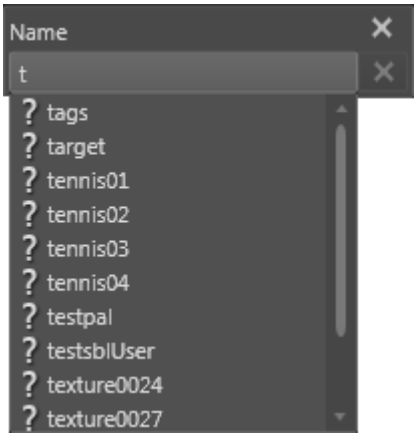
   An Advanced Search area is displayed for the Name parameter.

How to Perform a Search on Free Text

To enter search values in a free text field of the , proceed as follows:

1. Type a search string in the field, based on the rules detailed in "Free Text Search Syntax Rules" on page 34.

   A list of proposals is displayed as soon as you start to type and it is refined as you go on typing.



2. Select a line by using the mouse or by pressing the key.

   You can unselect a line by pressing the **Escape** key.

3. Press **ENTER**.

The search is launched on the selected tree branch.

The search results are displayed in the grid.

5.4.6. Search in Non-Free Text Fields

Preliminary Steps

Non-free text search fields of the Advanced Search pane give access to an option list to select a search value or to a Select Filter Condition window to define specific search values.

Before starting a search, do the following steps:

1. Select the tree branch in the Tree view.
2. In the Advanced Search pane, display the search criterion.

How to Perform a Search based on an Option List

To set a search criterion from an option list, proceed as follows:

1. Click the arrow next to a search field to display the option list for the corresponding criterion.

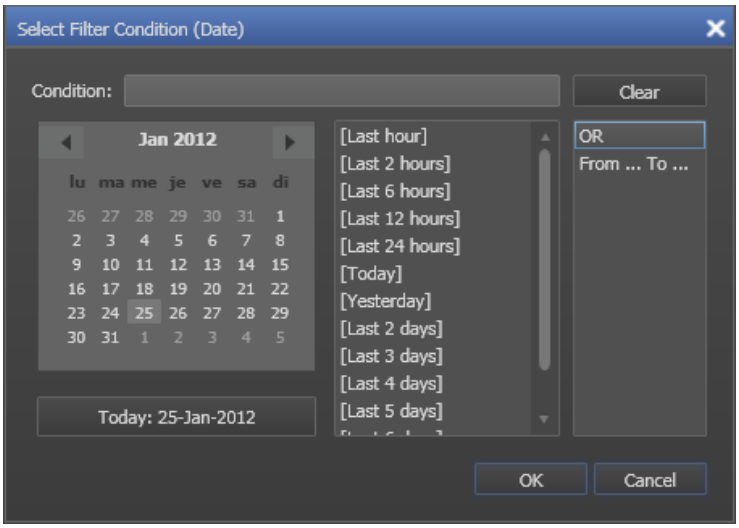
2. Select one or more options.
3. Confirm your selection with the button or cancel and exit by clicking the button.

How to Perform a Search based on a Date

To set a search criterion based on a date, proceed as follows:

1. Click the **Complex Filter** button next to a **Date** field

   The following window opens:



2. Enter a date condition in one of the following ways:
   - select a specific date from the calendar
   - select one of the relative date from the Last xx list
   - use the logical operators from the right pane to construct a more complex search condition:

     - Select a logical operator on the right

     - Select a date

     - Select a second date

   The search condition is displayed in the **Condition** field.
3. Click **OK**.

The search is launched on the selected tree branch.

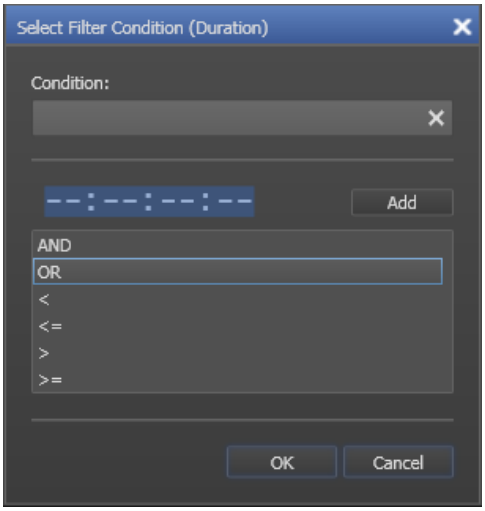
The search results are displayed in the grid.

How to Perform a Search based on a Duration

To set a search criterion based on a duration, proceed as follows:

1. Click the **Complex Filter** button next to a **Duration** field

   The following window opens:



2. Enter a duration condition in one of the following ways:
   - enter a single value in the **Timecode** field
   - use the logical operators from the lower pane to construct a more complex search condition:
3. Click **Add**.

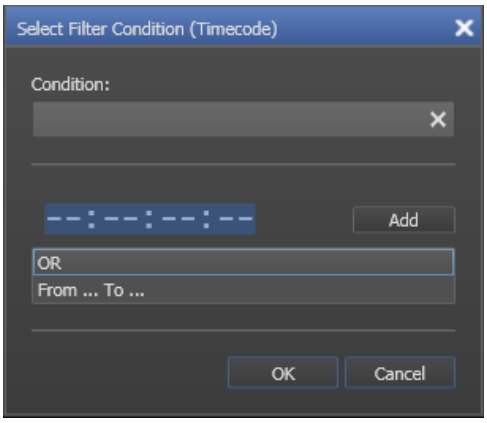
   The search condition is displayed in the **Condition** field.
4. Click **OK**.

How to Perform a Search based on a Timecode

To set a search criterion based on a timecode, proceed as follows:

1. Click the **Complex Filter** button next to a **Timecode** field

   The following window opens:

2. Enter a timecode condition in one of the following ways:
   - select a specific date from the calendar
   - select one of the relative date from the Last xx list
   - use the logical operators from the right pane to construct a more complex search condition:

     - Select a logical operator

     - Enter a timecode value

     - Click **Add** or press **ENTER**. It appears in the **Condition** field.

     - Enter a second timecode value

     - Click **Add** or press **ENTER**.

   The whole search condition is displayed in the **Condition** field.
3. Click **OK**.

The search is launched on the selected tree branch.

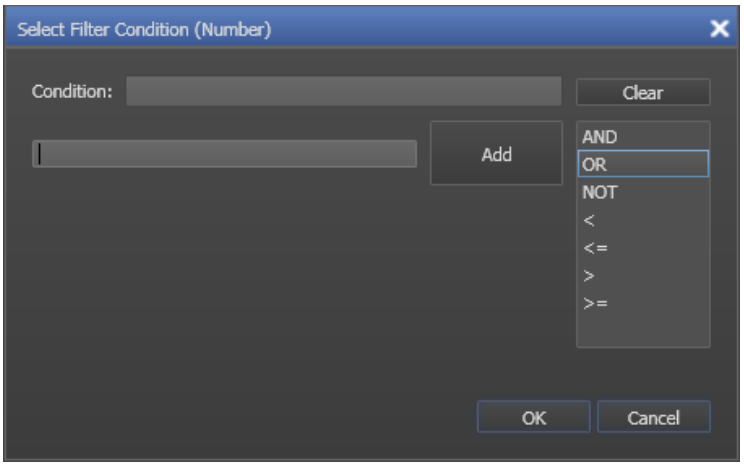
The search results are displayed in the grid.

How to Perform a Search based on a Number

To set a search criterion based on a number, proceed as follows:

1. Click the **Complex Filter** button next to a **Number** field

   The following window opens:



2. Enter a number condition in one of the following ways:
   - enter a single value in the **Number** field
   - use the logical operators from the right pane to construct a more complex search condition:
3. Click **Add**.

   The search condition is displayed in the **Condition** field.
4. Click **OK**.

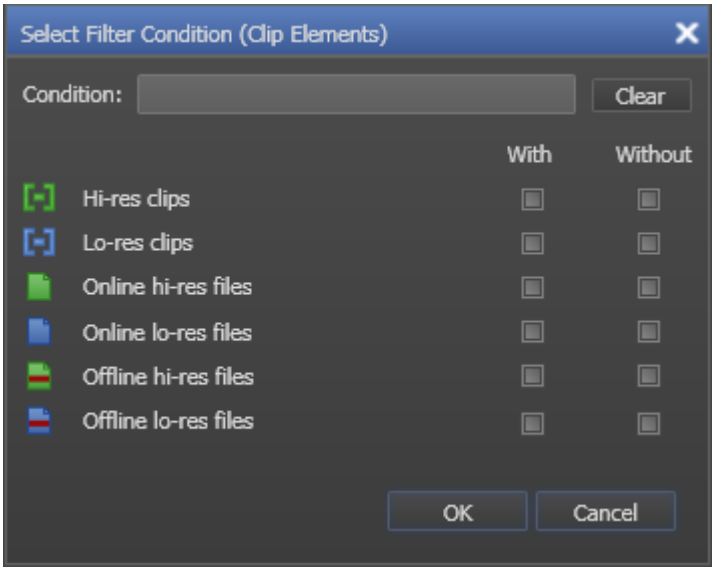
Note
Operators belonging to different groups may be combined.
- Group 1: AND, OR
- Group 2: NOT
- Group 3: <, >, <=, >=

How to Perform a Search based on Clip Element Types

To set a search criterion based on a selection of clip elements, proceed as follows:

1. Click the **Complex Filter** button next to a **Clip Elements** field

   The following window opens:



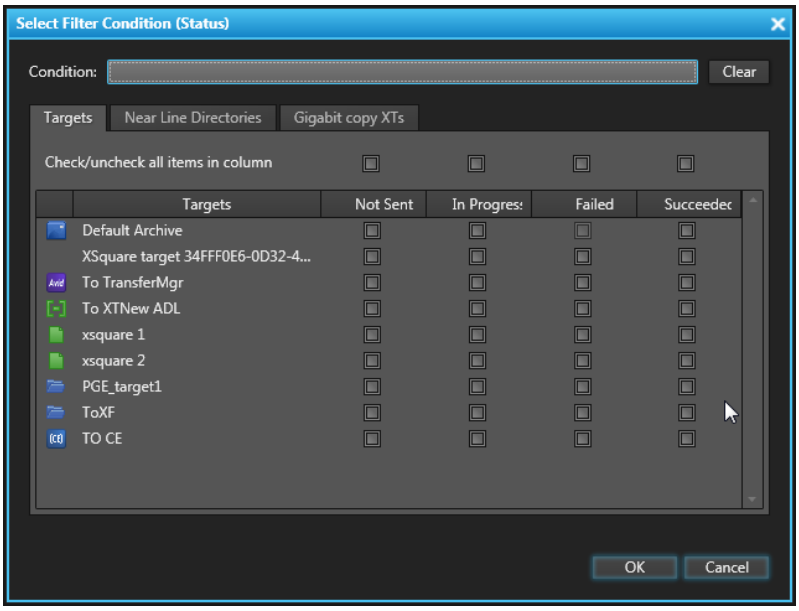
2. Select the options depending on whether you want to search for clips with or without the different element types.
3. Click **OK**.

How to Perform a Search based on the Transfer Status

To set a search criterion based on the transfer status, proceed as follows:

1. Click the **Complex Filter** button next to a **Status** field

   The following window opens:



2. Select the options based on the transfer status and the destinations the media has been sent to.

   Targets: lists all the targets defined in the Remote Installer.

   - the Xsquare targets (SOAP jobs) set from Xsquare and still available
   - the Xsquare targets (SOAP jobs) set from Xsquare which does not exist anymore
   - the targets set from the Remote Installer.

   Nearline directories: lists all the nearline directories, as defined in the Remote Installer.

   Gigabit copy XTs: lists all the EVS video servers which are part of the workgroup, as defined in the remote installer.

3. Click **OK**.

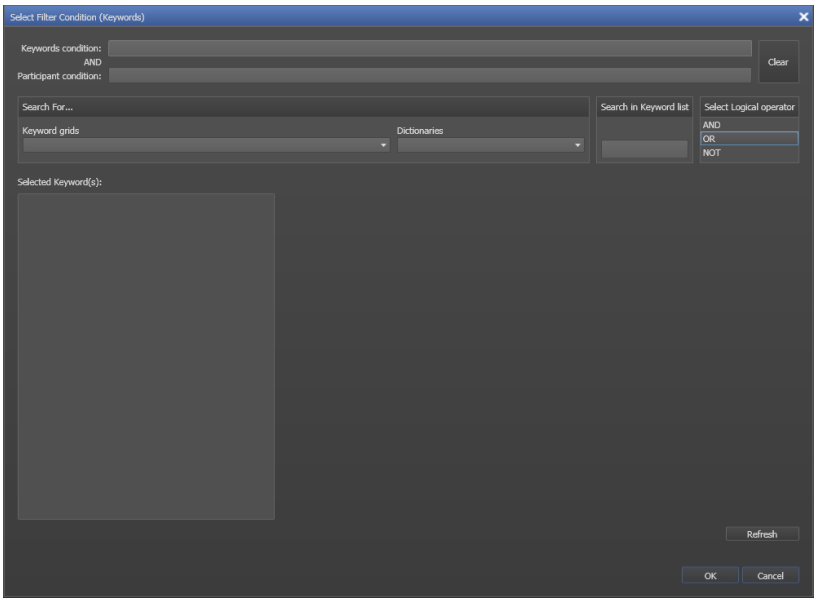
> **Note**
> Icons for destinations targets may have been customized from the Remote Installer.

How to Search for One or Several Keywords

To set a search criterion based on keyword(s), proceed as follows:

1. Click the **Complex Filter** button next to a **Keywords** field

   The following window opens:



2. Select a Keyword Grid or a Dictionary in the Search For pane, or click in the **Search in Keyword List** field.

   The selected Keyword grid or dictionary, or the Keyword list, is displayed in the lower right area of the window.

3. Select a keyword.

   It appears in the Selected Keywords area and in the **Keyword Condition** or **Participant Condition** field.

   Keywords which have been selected are shown with a different color in the Keyword grid, dictionary or Keyword list.

4. If required, select a logical operator. The NOT operator may be combined with one of the other operators.

5. Select a second keyword.

   The whole condition is shown in the **Keyword Condition** or **Participant Condition** field.

6. Click **OK**.

   The filter is applied to the Elements grid and the filter condition is displayed in the **Keywords** field.

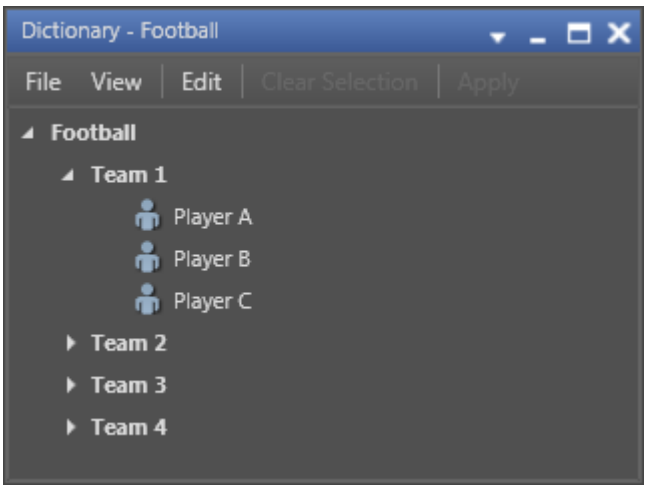
See section "Searching for Child Keyword Based on Parent Keyword" on page 43 for advanced search based on a parent keyword defined in a dictionary.

Searching for Child Keyword Based on Parent Keyword

Context of Use

Child and parent keywords can be defined in a tree structure into the IPDirector Dictionary tool. See section "Keywords Management" in the IPDirector user manual for more information.

During an event, the administrator can define all the player names of a football team as child keywords of the parent keyword "team name" or "country". Users can then assign a child keyword to logs or clips.



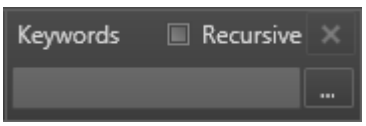
From the Elements grid, it is thereafter possible to retrieve the media linked to all the child keywords of the same parent keyword by using the **recursive** option.

How to Retrieve Child Keywords

To do so, proceed as follows:

1. In the Tree view, select the tree branch you wish to perform a search on.
2. In the Search Panel, click the **Advanced** button to display the **Add Search Criteria** field.
3. From the **Add Search Criteria** drop-down list, select the Keywords parameter.

   The Keywords advanced search field is displayed.
4. Select the **Recursive** checkbox to perform a search on all the child keywords linked to the selected parent keyword

5. Click the **Complex Filter** button .

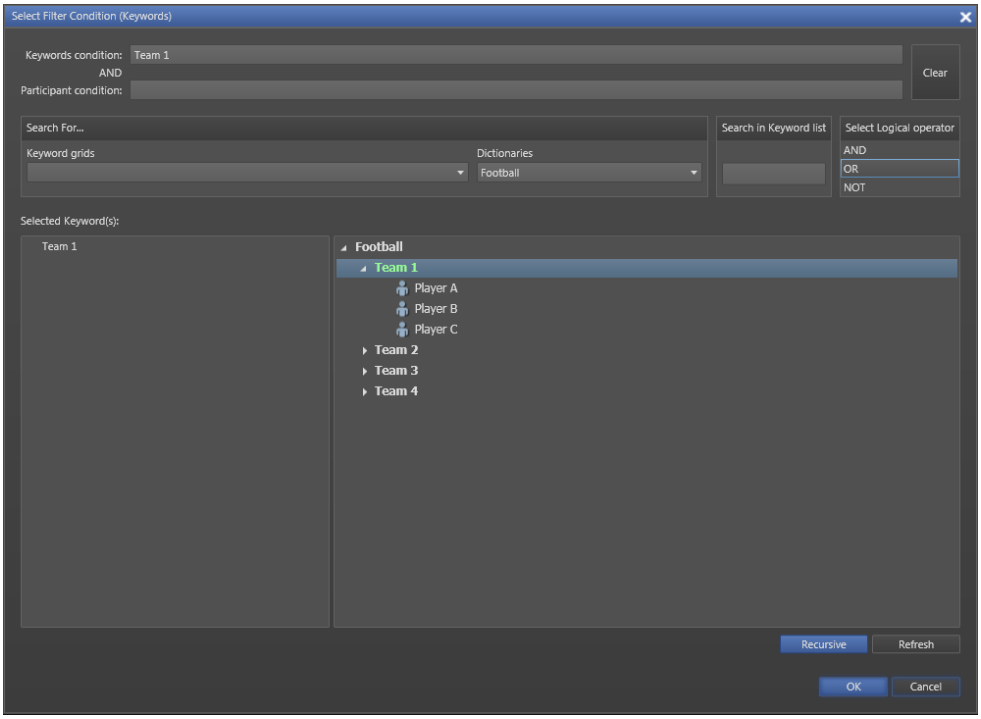
   The Select Filter Condition (Keywords) window opens.

6. In the **Dictionaries** field, select the dictionary name.

   The keywords from the selected dictionary are displayed in the list.

7. Select the parent keyword on which you want to perform a search.

   It is displayed in the **Keywords Condition** field.



8. Click the **Recursive** button if you have not selected the **Recursive** option from the Keywords advanced search field (step 4).

9. Click **OK**.

The list of elements containing a child keyword of the selected parent keyword is displayed in the Elements grid.

5.5. Using Saved Filters

5.5.1. Introduction

Once you have defined filters and search terms, you may want to save them for later use. You will then be able to apply the same set of filters with a single click.

Saved filters will be common between:

- the Clips tree and the Clip view in bins
- the Timelines tree and the Timelines view in bins

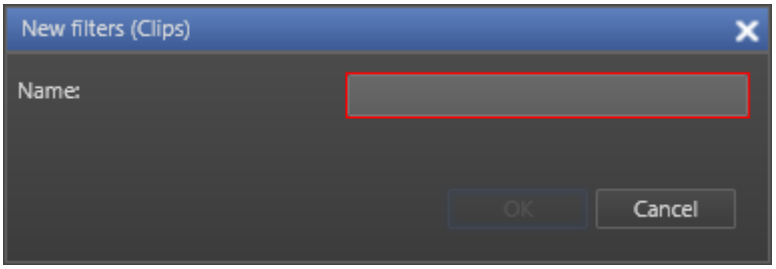
5.5.2. How to Save Filters

To save filters, proceed as follows:

1. Define the filters you wish to save.
2. Click the Favorites button .

   A menu is displayed.
3. Select **Save Current Applied Filters**.

   The following window is displayed:



4. Enter a name for the applied filters set.
5. Click **OK** to confirm.

   The new filter name is listed in the menu available from the **Favorites** button.

5.5.3. How to Apply a Saved Filter

To apply a saved filter, proceed as follows:

1. Click the **Favorites** button.

   A menu is displayed and lists the already saved filters.
2. Select the desired saved filter.

   Your filter(s) are shown in the Advanced Search areas and/or **Quick Text Search** field and they are applied in the grid.

5.5.4. How to Delete a Saved Filter

To delete a saved filter, proceed as follows:

1. Click the **Favorites** button.

   A menu is displayed and lists the already saved filters.
2. Click the **X** button next to the saved filter you want to delete.
3. Click **YES** to the message "Are you sure you want to delete these filters?"

   The filter does not appear anymore in the **Favorites** menu.

6. Managing Media Items

6.1. Pane Bins Area

Purpose

The Pane Bins area, located on the left part of the main window, allows the user to manage the edits and all the elements which can be used in edits.

The items visibility depends on the user rights granted to the logged user.

Contextual menus are available from most of the items in the Tree view and the Elements grid. They allow specific operations to be done on the selected item.

Drag-and-drop operations are allowed between or from some of the Pane Bins items. They are mentioned in the following sections.

Hiding and Displaying the Pane Bins Area

The Pane Bins area can be hidden or displayed by clearing or selecting the **Bins** option from the **View** menu in the main Menu bar.

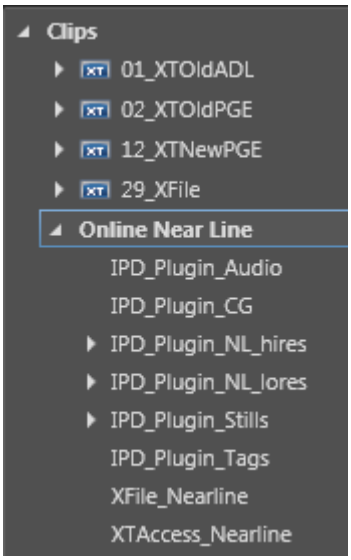
If you want to extend it, move the mouse to the border between the Pane Bins area and the Work area and left-click the mouse when the mouse cursor changes to .

6.2. Managing Clips

6.2.1. Description

Clips Availability

Although clips stored on EVS video servers are show in the **Clips** branch of the Tree view, they cannot be used from the IPD Xedio plugin. Only the elements present on a nearline created from the IPDirector Remote Installer and declared in the Xedio Media server can be used with the IPD Xedio plugin.



Clips can be organized in bins.

They can be used as such in edits or they can be trimmed to create sub-clips which could be used in edits.

Clip Element Types

A clip is a logical entity that contains A/V media and can include several physical resources (clips and/or files).

A clip element is the physical resource inside the clip: XT clip or nearline file.

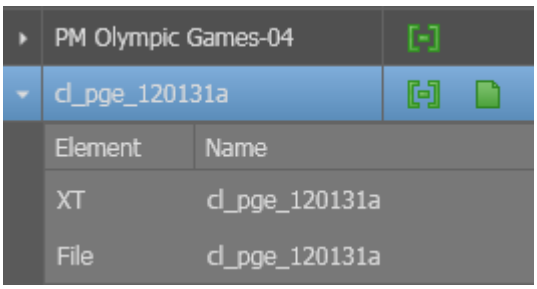
A clip and its clip elements share the same TC IN, TC OUTand metadata set.

A clip can contain up to six types of clip elements and each of them is identified in the Elements grid by a distinct icon, as detailed in the table below.

Icon	Clip Element	Description
	XT high resolution clip	high resolution clip or growing clip stored on an EVS video server.
	XT low resolution clip	low resolution clip or growing clip stored on an EVS video server.
	on-line high resolution nearline file	high resolution file stored in nearline folders, IP drive is on-line (accessible and managed).
	on-line low resolution nearline file	low resolution files stored in nearline folders, IP drive is on-line (accessible and managed).
	off-line high resolution nearline file	high resolution files stored in nearline folders, IP drive is no more on-line.
	off-line low resolution nearline file	low resolution files stored in nearline folders, IP drive is no more on-line.

In the Elements grid, the Clip Elements column shows the icons for the different clip elements making up the clip.

Each clip is displayed on a separate line but the view can be expanded thanks to a small arrow at the beginning of each line. Files and XT clip elements making up the clip are then displayed on separate lines.



Note
There can be several copies of the same element within a clip.

Warning
Only the on-line files can be used with the IPD Xedio plugin, provided that they are present on a nearline created from the IPDirector Remote Installer and declared in the Xedio Media server.

Media Types for Clips

Clip Content Types

Various types of media are considered as clips. Those media types are A/V files, audio files, stills and logos. All are displayed in the Clips view of the Elements grid.

The **Content Type** column provides the indication on the media type. Those are Audio/Video (for A/V files and logos), Audio only (for audio files), Still (for still files).

Properties of the Clip Media Types

Audio Files

Supported audio files are .wav (48KHz, 16 bits or 24 bits).

Audio files are referenced in the Elements grid with a low resolution file icon and with a high resolution file icon but both clip elements point at the same file which will be used as a low resolution file or as a high resolution file according to the Xedio workstation format.

Still Files

Supported still files are .tga, .jpg, .tiff, and .bmp.

Still files are referenced in the Elements grid with a low resolution file icon and with a high resolution file icon but both clip elements point at the same file which will be used as a low resolution file or as a high resolution file according to the Xedio workstation format.

Logo Files

Supported logo files are .km.

Logo files are considered as Audio/Video files by IPDirector.

They are referenced in the Elements grid with a low resolution file icon and/or with a high resolution file icon, the two clip elements being actually two distinct files.

Nearline Contextual Menu

A contextual menu is available when right-clicking a nearline name in the Tree view. The following table describes the commands:

Command	Description
New Directory	Opens the Create Directory window. The new directory is created under the selected nearline.
Search New File in Directory and Sub-Directory	Compares the database content and the selected directory and its sub-directories. If the system finds a new file, it adds it to the database.

Command	Description
Re-Scan Directory	Re-scans the selected directory: the system erases all the items from the database and then inserts all the items found in the directory. IPDirector checks the presence of new files or the absence of files referenced previously and updates the directory content.
Re-Scan Directory and Sub-Directory	The system re-scans the selected directory and its sub-directories: it erases all the items from the database and then inserts all the items found in the directory and its sub-directories.
Stop Scan	Stops the ongoing scanning operation.

6.2.2. Possible Actions on Clips

Clip Contextual Menu

The Clip contextual menu is available when right-clicking a clip in the Elements grid. It gives access to the actions that can be performed on clips.

Note
No contextual menu is available from a record train.

The following commands are listed in the Clip contextual menu:

Cut
Cuts the selected clip.
Only available from the Clips tab when a Bins tree branch is selected.

Copy
Copies the selected item. It can then be pasted into the clipboard or in a bin.

Paste
Pastes a shortcut of the copied clip into the selected bin.
This option is available from the Elements grid when an clip has been copied and a bin is now selected.

Send to
Provides a list of possible destinations to which the selected item can be sent. Possible destinations are:
- the user's default bin
- the user's default playlist (only available for a clip)
- any target destination visible on the GigE network that has been defined in the Remote Installer (CleanEdit targets, Avid targets, Final Cut Pro targets, File targets, EVS servers targets).
- any target that has been defined in the connected Xsquare.

Backup to Nearline
Used for the storage or the backup of the selected item to the default nearline or to a nearline directory.
Provides a list of possible nearline destinations to which the selected item can be sent as file, that is to say any destination folder visible on the GigE network that has been defined in the Remote Installer to allow transfer. The file format is defined in the Remote Installer.

Users can access the A/V material of nearline folders in IPDirector, or restore it on an EVS server.

Publish
Opens the Publish window to publish the selected clip, or clip element within the clip, to selected groups of users.

Delete
Allows the deletion of the selected clip.

Edit
Opens the Edit Clip window, similar to the Save Clip window, from which the user can modify the clip information.
See section "Save Clip Window Overview" on page 77.

Properties
Displays information related to the owner and the groups the selected item has been published to.

Other Possible Actions on Clips

The following table describes the various actions you can perform on a clip, in addition to those you can perform from the contextual menus:

If you want to…	You need to…
Viewing a clip on Player	• Drag a clip from the Elements grid to the Player or • Double-click a clip in the Elements grid The clip line will be highlighted in dark green in the Elements grid. See section "Loading Media onto the Player Area" on page 69.
Creating a sub-clip and save it to bin	Drag a sub-clip from the Player to a bin in the Tree view. See section "Creating and Working with Clips in the Player" on page 74.
Sending a clip to a bin	• Drag a clip from the Elements grid to a bin or • Drag a clip / sub-clip from the Player to a bin See section "Creating and Working with Clips in the Player" on page 74.
Adding a clip to an edit	• Dragging the clip from the Player into a bin when the **Fill** button is active. • Dragging the clip from a bin or nearline to a given position in the edit. • Dragging the clip from the Player to a given position in the edit. See section "Placing Clips onto the Timeline" on page 121.
Immediately playing out a clip as video	Drag a clip to the Playout tab. See section "Playing Out an Edit" on page 229.

6.3. Managing Playlists

6.3.1. Description

Although on-line playlists, which means playlists stored on EVS video servers, are show in the **Playlists** branch of the Tree view, they cannot be used from the IPD Xedio plugin. Only off-line playlists can be used with the IPD Xedio plugin.

Playlists can be organized in bins. They must be converted to edits prior to be used in IPD Xedio plugin.

6.3.2. Possible Actions on Playlists

Playlist Contextual Menu

The Playlist contextual menu is available when right-clicking a playlist in the Elements grid.

The commands are described hereafter.

Cut
Cuts the selected playlist.
Only available from the Playlists tab when a Bins tree branch is selected.

Copy
Copies the selected item. It can then be pasted into the clipboard or in a bin.

Paste
Pastes a shortcut of the copied playlist into the selected bin.
This option is available from the Elements grid when an playlist has been copied and a bin is now selected.

Convert to Edit
Converts the playlist to an edit.
See section "Converting a Playlist to Edit" on page 53.

Edit/Rename
Opens the Edit a Playlist window from which the users can modify the properties of the selected playlist.

Create an off-line copy
Creates an off-line copy of the selected playlist.
This new off-line playlist has the same content as the playlist selected. It also has the same name but it has no LSM ID.

Properties
Displays information related to the owner and the groups the selected item has been published to.

Other Possible Actions on Playlists

The following table describes the action you can perform on a playlist, in addition to those you can perform from the contextual menus:

Action	Description
Sending a playlist to a bin	Drag a playlist from the Elements grid to a bin

6.3.3. Converting a Playlist to Edit

Introduction

IPD Xedio Plugin allows the users to convert a playlist to an edit. The edit could then be managed by Xedio IPD plugin in an easy way.

The conversion process keeps all the metadata from the playlist.

How to Convert a Playlist to Edit

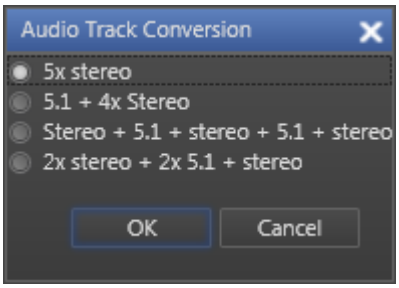
To convert a playlist to edit, proceed as follows:

1. Right-click the selected playlist in the Elements grid.

   The Playlist contextual menu is displayed.

2. Select **Convert to Edit**.

   The Audio Track Conversion window opens:



3. Select one of the available audio configurations for the edit.
4. Click **OK**.

The edit is created with the playlist name and can be retrieved from the Edits tree branch .

6.4. Managing Edits

6.4.1. Description

An edit is a container for an EDL, or Edit Decision List. It is represented by its name, its metadata and its EDL. The EDL is the representation of the edit. In the IPD Xedio plugin, the edit is graphically represented when it is loaded on the Timeline pane.

Edits may have been created from the IPD Xedio plugin, the Director's Cut module of IPDirector or the IPBrowse application. They can also be created from the conversion of a playlist. Edits can only be modified from the CleanEdit interface.

They can be organized in bins and sent to targets.

6.4.2. Possible Actions on Edits

Edit Contextual Menu

You can manage an edit via the Edit contextual menu. To access it, right-click an edit in the Elements grid.

The available commands are described hereafter.

Cut
Cuts the selected edit.
Only available from the Edits tab when a Bins tree branch is selected.

Copy
Copies the selected item. It can then be pasted into the clipboard or in a bin.

Paste
Pastes the copied or cut edit.
Only available from the Edits tab when a Bins tree branch is selected.

New Edit
Opens the New Edit window to create a new edit.
See section "Creating an Edit" on page 56 for more information on the fields available in this window.

Send to
Provides a list of possible destinations to which the selected item can be sent. Possible destinations are:
- the user's default bin
- the user's default playlist (only available for a clip)
- any target destination visible on the GigE network that has been defined in the Remote Installer (CleanEdit targets, Avid targets, Final Cut Pro targets, File targets, EVS servers targets).
- any target that has been defined in the connected Xsquare.

Flatten to XT
Displays a list of high resolution EVS servers and pages available on the XNet network to which the user can store a consolidated clip out of the selected item.

The flattened clip will have the same VarID as the original item. That is the reason why the flattened clip cannot be stored on the same EVS server as the original item, otherwise, this would result in a VarID conflict.

Backup to Nearline
Used for the storage or the backup of the selected item to the default nearline or to a nearline directory.
Provides a list of possible nearline destinations to which the selected item can be sent as file, that is to say any destination folder visible on the GigE network that has been defined in the Remote Installer to allow transfer. The file format is defined in the Remote Installer.
Users can access the A/V material of nearline folders in IPDirector, or restore it on an EVS server.

Import...
Allows importing an edit, together with its EDL and metadata from an XML file into IPDirector.

Export...
Allows exporting the selected edit. The whole EDL is copied to an XML file.

Publish
Opens the Publish window in which you can specify the user groups the selected item should be published to.
The item will be published to the selected groups, providing that they have the adequate rights.

Edit/Rename
Opens the Edit Edit window in which you can modify the edit information and metadata as entered when the edit was created.

Delete edit
Deletes the selected edit(s).

Duplicate
Duplicates the edit by creating a new one with the same name, metadata and EDL.

Properties
Displays information related to the owner and the groups the selected item has been published to.

Other Possible Actions on Edits

The following table describes the various actions you can perform on an edit, in addition to those you can perform from the contextual menu:

Action	Description
Creating an edit	See section "Creating an Edit" on page 56.
Opening an existing edit	• Drag an edit from the Elements grid to the Recorder area or • Double-click an edit in the Elements grid. The edit becomes active. The edit line is highlighted in dark green in the Elements grid and its name is displayed in the Recorder area. The Timeline area shows the edit. The timeline buttons also become active.

Action	Description
Inserting an edit in an edit	Drag an edit from the Elements grid to the Timeline area where an edit is already displayed.
Sending an edit to a bin	Drag an edit from the Elements grid to a bin
Immediately playing out an edit as video	Drag an edit to the Playout tab. See section "Playing Out an Edit" on page 229.

All the next chapters widely describe the editing functions.

6.4.3. Creating an Edit

Possible Ways for Creating an Edit

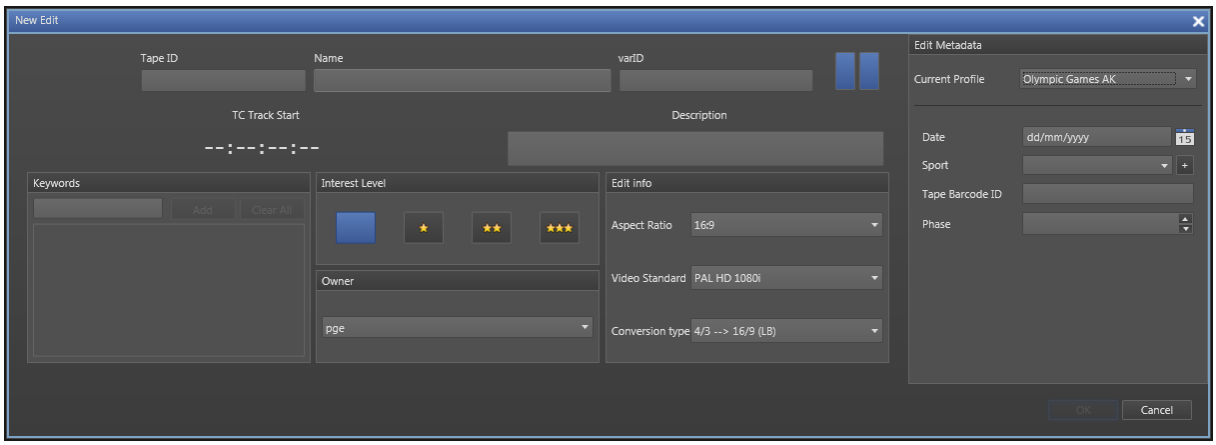
From the IPD Xedio Plugin, users can create an edit in one of the following ways:

- Create an empty edit with an EDL containing the edit metadata. This is done by right-clicking the **Edit** tree branch or an edit in the Elements grid, selecting **New Edit** from the contextual menu and filling the New Edit window described hereafter.
- Convert a playlist into an edit, as described in section "Converting a Playlist to Edit" on page 53.

New Edit Window

Window Overview

The New Edit window makes it possible to enter general and customer-defined data (called "metadata") for the edit. It is as follows:



The New Edit window is divided into two panes:

- The left pane contains the edit information, i.e. edit general data.

  It is always displayed.

- The right pane contains the edit metadata, i.e. edit data based on customer-specific fields defined in the metadata profile.

  It is displayed by clicking the right area in the Pane Display button .

Note
When the **Edit/Rename** option has been selected from the Edit contextual menu, the Edit window opens. It is similar to the New Edit window and it shows the data already entered for the edit. Users will not be able to modify some of them.

Content of the New Edit Window

The Edit Information pane contains the following user interface elements.

Tape ID
This identifies the tape on which the item is stored.

Name
User-defined name for the item. It can contain up to 64 alphanumeric characters.
It is mandatory.

VarID
VarID is a 32-character ID with variable length and format. It is automatically assigned to a new item. It is mainly used to ensure redundancy on the system. It can be unique for a clip on the EVS server level or on the XNet network level, depending on EVS video server settings.

TC Track Start
Timecode value of the first field of the edit.
The default value can be set under **Tools > Settings > IPEdit > General > Control Track Initial Timecode**, or left empty so the edit timecode will start at 00:00:00:00.

Description
Free text describing the edit.

Keywords
This area allows you to assign up to five keywords to an item to qualify its content.

Interest Level buttons
The **Interest Level** buttons allow users to assign an interest rating to an item. Four interest levels can be defined, from no star to 3 stars. The background of the button corresponding to the selected interest level is blue. The default value is the no star level.

Owner
Name of the user who created the edit.

Aspect Ratio
Aspect ratio of the edit. The possible values are **[empty]**, **4:3**, **16:9**.

The 16:9 value is automatically selected and cannot be changed when an HD video standard is choosen.
When the Edit Edit window is opened, an aspect ratio value can only be entered if the field was previously left empty.

Video Standard
Video standard of the edit.
When the Edit Edit window is opened, a video standard value can only be entered if the field was previously left empty.

Conversion Type
Conversion type for the aspect ratio of the edit.
If the aspect ratio is set to 16:9, the possible values are **4:3 -> 16:9 (PS)**, **4:3 -> 16:9 (LB)**.
If the aspect ratio is set to 4:3, the possible values are **16:9 -> 4:3 (PS)**, **16:9 -> 4:3 (LB)**

The Edit Metadata pane contains the following fields:

Current Profile
Drop-down list from which the users with appropriate user rights can select the metadata profile to be associated with the item.

Metadata Profile fields
Fields belonging to the metadata profile selected in the **Current Profile** field.
The users can modify the values of the **Metadata Profile** fields, if they have appropriate user rights. The modifications will only apply to the given item and not impact the default values of the profile.

6.5. Managing Bins

6.5.1. Description

All media connected to a particular project or event can be organized into a bin. The Bins tree structure is customized by the users depending on how they want to organize their clips, playlists or edits. Directories can be created by the users to organize their bins.

The Elements grid contains three tabs, **Clips**, **Playlists** and **Edits**, to display respectively the clips, playlists and edits that the users have sent to the selected bin.

6.5.2. Bin Contextual Menu

From the Bins node, different contextual menus can be accessed by right-clicking the Bins tree node, a bin directory or a bin.

The commands are described hereafter.

Publish
Opens the Publish window in which you can specify the user groups the selected bin or bin directory should be published to.
The bin or bin directory will be published to the selected groups, providing that they have the adequate rights.

New bin
Opens the Create a New Bin window where you can specify the name of the new bin.

This is available from a bin directory or from the Bins node of the tree view. Not available from a bin nor from the Users bin directory.

New directory
Opens the Create a New Directory window where you can specify the name of the new directory.
This is available from a bin directory or from the Bin node of the tree view. Not available from a bin nor from the Users bin directory.

Delete selected
Deletes the selected bin or directory.
Click **Yes** in the confirmation window that appears to delete the bin or bin directory.
This is not available from the Users bin directory, from any System [user] bin directory, nor from any System [user] bin.

Rename selected
Opens a window where you can change the name and description of the bin or bin directory.

Properties
Displays information related to the owner and the groups the selected bin or directory has been published to.

6.5.3. Bin Element Contextual menu

The contextual menus available when right-clicking a bin item in the Elements grid are similar to those in the Elements grids for each type of items.

The commands that differ from the contextual menus in the other Elements grids are detailed in the table below.

For information on the common commands, refer to the following sections:

- "Clip Contextual Menu" on page 50,
- "Playlist Contextual Menu" on page 52,
- "Edit Contextual Menu" on page 54 .

Command	Description
Remove from bin only	Removes the selected item from the bin.
CLIPS: Delete	Deletes the selected clip from the bin and the actual clip location.
EDITS: Delete Edit	Deletes the selected edit from the bin and the actual edit location.

6.6. Managing Logs

6.6.1. Description

Important Note

The logs available from the Logs branch of the Tree view are external logs created with IPDirector. Internal logs, created with CleanEdit exist but are not listed in the Elements grid. See section "Adding Logs to the Media Loaded on the Player Area" on page 82 for more information on those internal logs. The current section only covers external logs.

Definitions

Logs and Logsheets

A log is a reference point to a specific frame in a video sequence. The log is identified by a TC value, and relates to an action in a given event. It can be associated to metadata related to the event (keywords and/or a ranking, for example).

Their purpose is to mark points of interest on the media and to facilitate rapid movement between them.

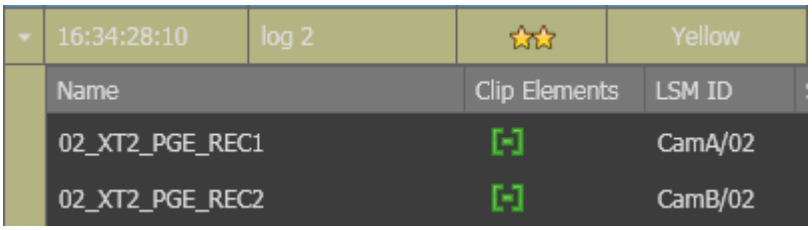
In IPDirector, logsheets are created to contain all logs for a given event, and can contain their own metadata.

Logs and Associated Media

Log Entries

A log has been created on each relevant recorder channel defined at the logsheet creation.

This displays as follows in the Elements grid:



Protect Media Clips

A clip has been created around the log timecode to protect the A/V material.

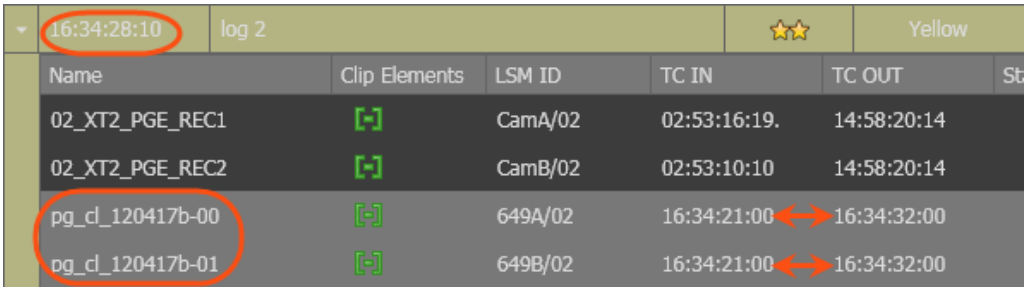
This displays as follows in the Elements grid:

Associated Clips

A clip containing a log timecode has been created by a user and the system has automatically detected it and associated it to the log.

This association is done provided that the **Auto-associate clips to logs** option has been selected in the Remote Installer (**Configure > General**).

This displays as follows in the Elements grid:

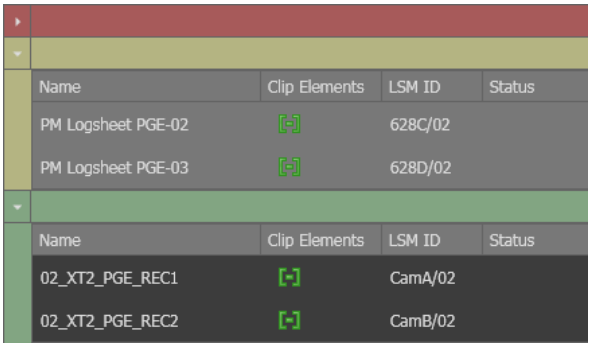


Logs Availability

The Logs branch of the Tree view contains sub-branches for each logsheet and for any log directory which have been created from IPDirector. Logsheets may have been organized into log directories. See section "Tree View" on page 5 for the description of each icon displayed in the Tree view.

The Elements grid represents the content of the selected logsheet. Logs are displayed with the highlighted color associated to each of them at creation in IPDirector.

The log view can be expanded thanks to a small arrow at the beginning of each line in the grid to display log entries, Protect Media clips and associated clips.



Log entries cannot be used as such in the IPD Xedio plugin. Only the Protect Media clips and Associated clips present as files on the shared nearline can be loaded on the Player and used in edits, in the same way as clips stored on the nearline.

6.6.2. Log Directory and Logsheet Management

Log Branch and Log Directory Contextual Menu

Contextual menus are available when you right-click the Logs branch or a log directory in the Tree view.

The commands are described hereafter.

New Directory
Creates a new log directory. You can create sub-directories in the same way.

Rename Directory
Renames a new log directory.

Delete
Deletes a log directory from the EVS video server and the database.

Publish
Opens the Publish window to publish the log directory to selected group of users.
The log directory will be published to the selected groups providing that they have the adequate rights.
If the Publish action is done from a log directory, all logsheets present in this directory and its sub-directories will be published to the selected user groups.

Properties
Displays information related to the owner and the groups the selected item has been published to.

Logsheet Contextual Menu

A contextual menu is available when you right-click a logsheet in the Tree view.

The available commands are described hereafter.

Export
Opens the Export a Logsheet window from which you can browse for the destination folder, select the desired file type and enter a file name.
A logsheet can be exported either in XML or in text format (CSV).
- XML files can be re-imported into another IPDirector workstation at a different location.
- CSV files can be re-imported into software such as Microsoft Excel ® to produce a printout.

During the export process, the logsheet keywords and the logs keywords appear in the XML or CSV file in the order they have been entered by the logger.

Export current logging profile
Opens the Export Profiles window from which you can browse for the destination folder, select the desired file type and enter a file name.
A logging profile used with a logsheet can be exported in XML format.

Deactivate logsheet
Deactivates a logsheet. This can be done when the logsheet is completed to improve the performance of the system. Once de-activated, a logsheet cannot be modified and cannot be associated to clips. This permits to reduce the network load and database activity. Refer to the IPLogger chapter for more details.

Reactivate logsheet
Re-activates a logsheet which has previously been de-activated.

Delete
Deletes a logsheet from the EVS video server and the database.

Enter TC Offset
Opens the Enter Logsheet Offset window from which you can set a timecode offset when logs and clips have been created on different machines, with different timecode values. Refer to the IPLogger chapter for more details.

Publish
Opens the Publish window to publish the logsheet to selected group of users.
The logsheet will be published to the selected groups providing that they have the adequate rights.

Properties
Displays information related to the owner and the groups the selected item has been published to.

6.6.3. Possible Actions on Logs and Clips from Logs

Clip Contextual Menu

A contextual menu is available when right-clicking a Protect Media clip or an Associated clip in the Elements grid. It is the same menu as the one displayed for a clip.

See section "Possible Actions on Clips" on page 50.

Other Possible Actions on Logs and Clips

All the actions described for clips are possible on Protect Media clips and Associated clips present as files on the shared nearline.

See section "Other Possible Actions on Clips" on page 51.

7. Main Workspace for Editing

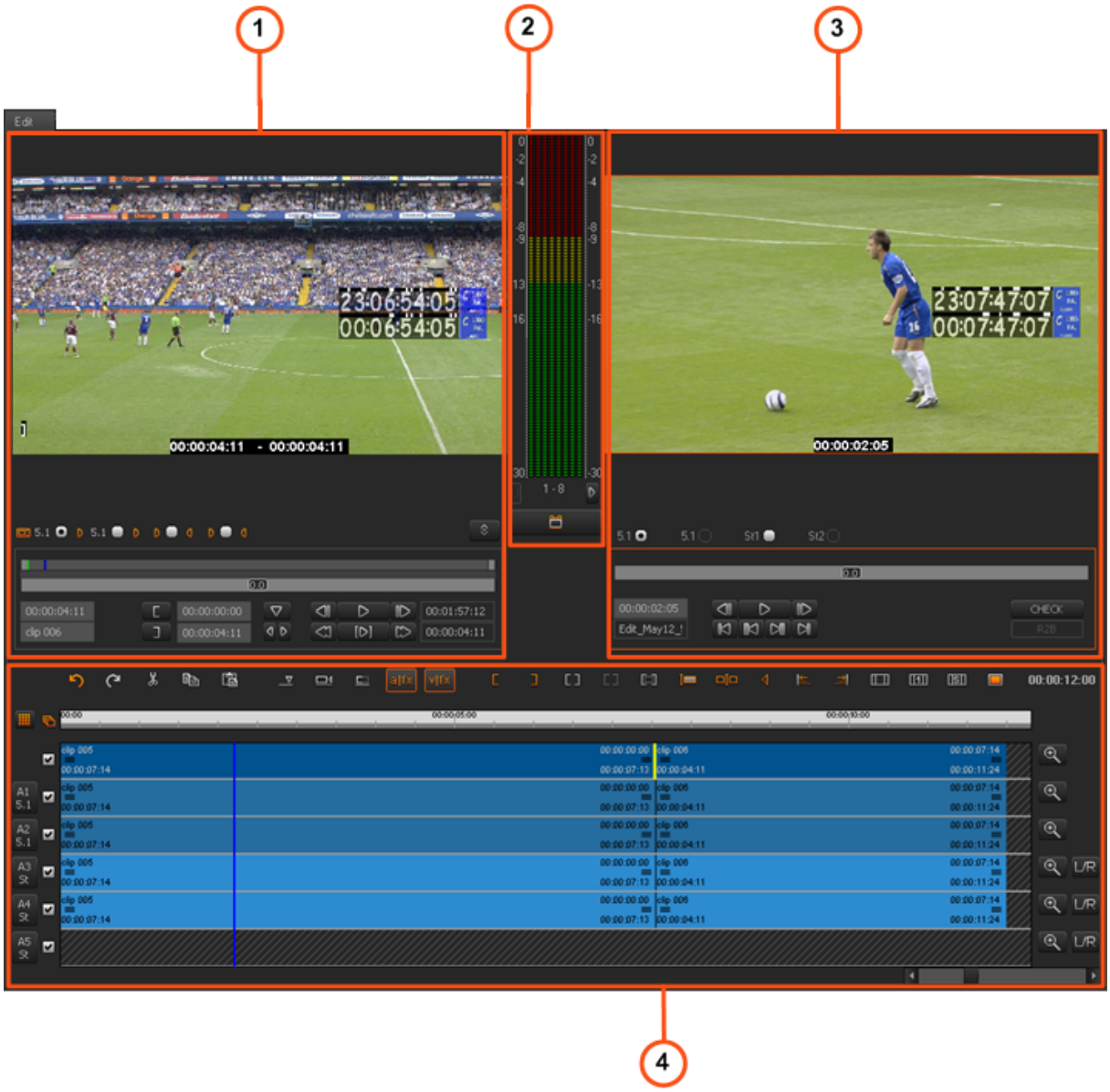
7.1. Edit Tab Overview

Introduction

Clips and edits are created in the Edit tab.

Illustration

The Edit tab contains the areas highlighted on the screenshot below:



Area Description

The table below refers to the sections where the various parts of the Edit tab are detailed:

Part	Name	Description
1.	Player pane	See section "Player Pane" on page 65.
2.	Audio Meters and Trim pane	See section "Audio Meters / Trim Pane" on page 93.
3.	Recorder pane	See section "Recorder Pane" on page 86.
4.	Timeline pane	See section "Timeline Pane" on page 95.

7.2. Player Pane

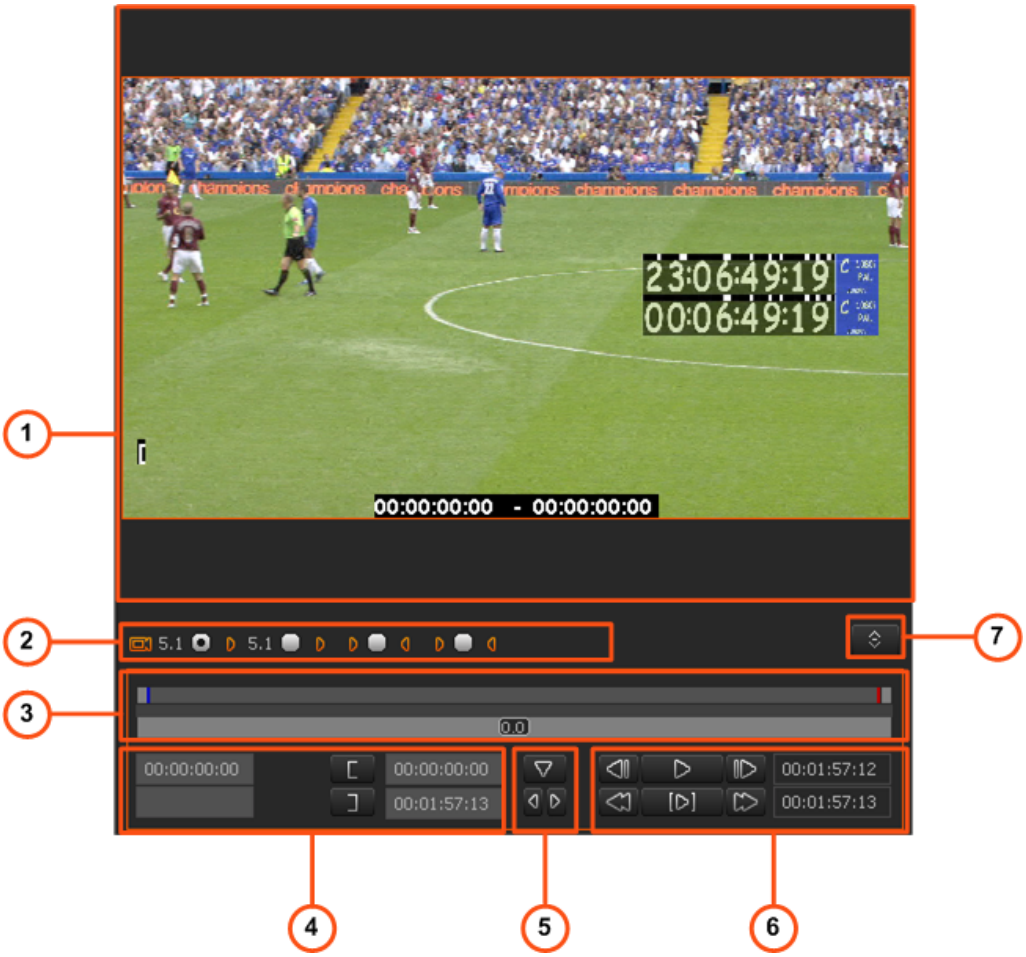
7.2.1. Overview

Introduction

The Player pane is used to load and browse media on the Edit tab, create clips to place onto the timeline or to drag to the clip list area. All types of media and clips can be played in the Player: video, audio or stills.

Illustration

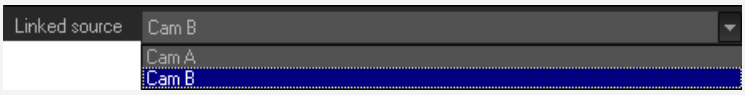
The Player pane contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the Player pane:

Part	Name	Description
1.	Video Display	It displays the video material loaded on the Player. Everything that is outside the video content has the skin color. Video such as letterboxed or pillarboxed video will show black bars as these mattes are part of the video signal. Parameters related to the display are available via a contextual menu. See section "Video Display Options" on page 68.
2.	Track Selection buttons	They allow the user to select the tracks to be taken into account when the loaded material is added to the timeline. See section "Selecting the Tracks to be Added to the Timeline" on page 79.

Part	Name	Description
3.	Jog and Media bars	They allow the user to navigate in the loaded material, to place IN, OUT and nowline points, as well as to modify the playback speed of the material. See sections "Jog Bar" on page 91 and "Media Bars" on page 69.
4.	Clip Creation fields	They are used to create new clips, and get the exact timecode of the nowline, IN and OUT points. See section "Creating and Working with Clips in the Player" on page 74.
5.	Log buttons	The logs make it possible to add reference points to easily identify positions of interest in the loaded media. See section "Adding Logs to the Media Loaded on the Player Area" on page 82.
6.	Transport Control buttons	They are used to play back the loaded media. See section "Transport Commands in the Player" on page 71.
7.	Server Recorder selection	The button acts as a toggle switch between the Track Selection buttons and the camera selection list  Several cases can occur: • If the loaded media/clip contains more than 8 audio tracks, only the first 8 tracks are displayed. A first click on the button allows to display the additional tracks. • If the loaded clip belongs to a group of linked clips (for example, clips created with ganged channels in IPDirector), the list displays the various camera angles and allows the user to select a clip linked to the one loaded. With Multicam 14, depending on the server configuration, up to 12 channels can be used, which corresponds to letter A to L. • If an individual clip is loaded, only its recorder channel is available. If a media ingested from an encoder is loaded, the button is not available.

NEW !

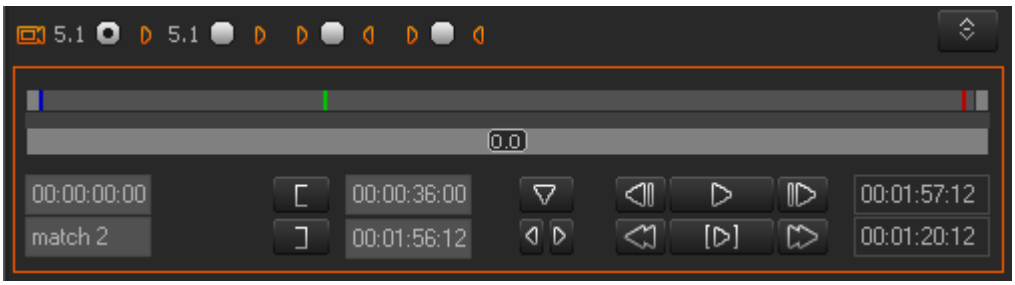
You can access the various commands of the Player pane, either by clicking the buttons on the user interface, or by pressing the dedicated keyboard shortcuts (which are assigned in Xedio Manager).

7.2.2. Activating the Player Area

To be able to use the Player and the various commands it features, you need to activate it.

To activate the Player, click on the Player area or press on the keyboard. When you drag a media to the Player, it is directly activated.

A colored rectangle displayed around the Player commands indicates that the Player area is active:



7.2.3. Making the Player Area Full Screen

To view the Player area as a full-screen image, press on the keyboard.

Press the shortcut key again to revert to the normal display.

7.2.4. Video Display Options

A contextual menu is available when right-clicking the Video Display area. This gives display options for the video.

Show Timecode

This option offers various options to display timecode on the Player window.

- **none**: does not display timecode.
- **Start TC**: shows a counter starting with 0 at the first frame of the media.
- **Intra TC**: shows the original timecode of the media.

Aspect Ratio

This option offers a choice of aspect ratios for the display: **Auto**, **4:3** or **16:9**.

Show Safe Areas

This option displays a safe area cage on the window to determine which areas of the picture will be seen. This allows to check the size of graphics within the media for safe display.

Grab Image

Grabs the current image, either in low resolution or in high resolution. The default folder (c:\) where the grab is stored is defined in Xedio Manager > Software > ParameterProfiles > General > General tab settings: **GrabStillFrameFolder** parameter.
The option dos not applies to the Recorder Video Display.

Show Label

Displays the name of the loaded item on the top of the Video Display.

7.2.5. Loading Media onto the Player Area

Introduction

The action of "placing" a media or a clip on the Player pane to preview it, sub-clip it, and so on, is called "loading a media or clip on the Player".

This can be done in different ways.

How to Load a Clip in the Clip Player

To load a media or clip on the Player pane, proceed in one of the following ways:

- double-click the requested media or clip from the Pane Bins area
- drag the media or clip from the Pane Bins area onto the Player area
- select two clips in the edit from different timeline tracks and drop them in the Player to access a media and select the correct audio tracks. This is possible only if video and audio edit clip access the same media with the same timecodes.

7.2.6. Moving Within Media Loaded on the Player Area

Media Bars

Top Bar

The top bar represents the media, or a portion of it, currently loaded on the Player.

The mark IN, mark OUT and nowline are displayed on this top area.

Middle Bar

The middle bar is used to zoom into the loaded element.

Its dark gray zone shows the section of the media, out of the whole media, visible in the top bar and the relative position of the visible section in the whole media.

- When a media or an edit has just been loaded, the top bar represents the whole media. The dark gray zone covers the whole length of the middle bar:

- When a mark IN and a mark OUT are defined,, double-clicking on the dark gray zone toggle the section covered by the top bar from the whole media length to the clip length (between mark IN and mark OUT), and vice-versa:

The dark gray zone is reduced to represent the clip length and position with regard to the whole media.

- If you position the mouse on the middle bar and rotate the mouse wheel up or down, you respectively increase or reduce the section of the media visible in the top bar. Thus, the dark gray zone is enlarged or reduced:

- If you click on the dark gray zone and drag it to the left or to the right, you shift the section of media visible in the top bar to the beginning or to the end of the media.

Nowline, Mark IN and Mark OUT

Display

The (mark) IN point, the (mark) OUT point, and the nowline are shown in the media bar of the Player paneas vertical lines.

- An IN point, or mark IN point is shown as a green line on the media bar.
- An OUT point, or mark OUT point is shown as a red line on the media bar.
- The nowline, representing the current position within the loaded element, is shown as a blue line on the media bar. To place the nowline at a given position, simply click at the requested position on the media bar.

Moving Points

To move the position of the mark IN, mark OUT or nowline, click on them with the mouse and drag them to the desired position.

Nowline Outside Media Bar

When the media is being played, the nowline moves along the top media bar. If only a section of the media is visible in the top bar, the nowline may disappear. In this case, a red indicator, on the right side of the media bar will be displayed. A click on the vertical indicator (on the right side) will re-center the top bar on the nowline.

Moving the middle bar to the right or to the left can lead to such a situation, with the nowline disappearing respectively to the left or to the right of the top bar.

Jog Bar

The jog bar is the same in the Player pane and in the Recorder pane. In the Player pane, it is the bottom bar, under the Media bars.

Dragging the speed indicator on the jog bar allows you to move within the media at a variable speed:

The speed varies depending on:

- the position of the speed indicator
- the speed range covered by the jog bar. The default range is set from -200% to +200%. This is set in Xedio Manager.

Audio can be heard when using the jog.

Transport Commands in the Player

The following table gives the meaning of each transport operation which can be used with any loaded item. A button and/or a keyboard shortcut can be used to perform each action.

For a full list of commands activated via a shortcut key, refer to "Appendix 2 – Keyboard Shortcuts" on page 234.

Note
The user can customize the keyboard shortcuts in Xedio Manager. The keys mentioned below are the default settings.

Button	Keyboard Shortcut	Function Name and Description
	(space bar)	**Play/Stop** Start/stops the preview (video and/or audio) of the loaded media. The button switches to a **Stop** button when the media is being played.
	-	**"Near Live" Play Mode** Launches the preview at the end of a rush while digitizing.
		Fast Forward Plays the media forward at a preset fast speed. The button switches to a **Stop** button when the media is being played forward.
	-	**Fast Forward (with modified speed)** Changes the preset speed to higher speed value. The speeds are set with the **ShiftSpeedMax** parameter from **Parameters > Parameters Profiles > Media Dispatcher> Default profile > Player**.
		Fast Rewind Plays the media backward at a preset fast speed. The button switches to a **Stop** button when the media is being played backward.
		Fast Rewind (with modified speed) Changes the preset speed to higher speed value. The speeds are set with the **ShiftSpeedMax** parameter from **Parameters > Parameters Profiles > Media Dispatcher> Default profile > Player**.
		Plays a clip from mark IN to mark OUT
-		Plays a clip in loop from mark IN to mark OUT
-		**Go to IN** Moves from the current position to the Mark IN point.
-		**Go to OUT** Moves from the current position to the Mark OUT point.

Button	Keyboard Shortcut	Function Name and Description
	# 3 or ←	**Go to Previous Frame** Moves 1 frame before the current position in Pause mode.
	$ 4 or →	**Go to Next Frame** Moves 1 frame after the current position in Pause mode.
-	! 1 or Ctrl + ←	**Go 10 Frames Backward** Moves 10 frames before the current position in Pause mode.
-	@ 2 or Ctrl + →	**Go 10 Frames Forward** Moves 10 frames after the current position in Pause mode.

The J, K and L keyboard shortcuts are used to navigate (in a combination of shuttle and scrub at the same time) backwards and forwards in A/V content.

The following table lists their different uses.

Keyboard Shortcut	Function Description
J	Shuttles/scrubs backward at twice the real time speed. Pressing repeatedly the key will increase the shuttling/scrubbing speed in a loop: x1, x2, x3, x5, x8 and then back to x1. **Note** If another key is pressed between the J repetitions, the shuttle/scrub speed is reset.
K	Stops the preview of the A/V content.
L	Shuttles/scrubs backward at twice the real time speed. Pressing repeatedly the key will increase the shuttling/scrubbing speed in a loop: x1, x2, x3, x5, x8 and then back to x1. **Note** If another key is pressed between the L repetitions, the shuttle/scrub speed is reset.

Keyboard Shortcut	Function Description
Hold K **+ tap** J	Steps backward 1 frame at a time.
Hold K **+ tap** L	Steps forward 1 frame at a time.
Hold K **+ hold** J	Plays backward at 33% of the real time speed.
Hold K **+ hold** L	Plays forward at 33% of the real time speed.

Note
The use of ShuttlePRO keys for transport functions is detailed in "Appendix 1 – ShuttlePRO" on page 233.

7.2.7. Creating and Working with Clips in the Player

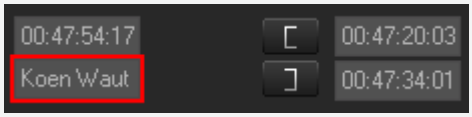
Introduction

When you have defined the portion of the media you want to place into the timeline, you can create a clip out of it and either store it in the Clip zone in the Project area and/or place it directly in the timeline.

To create a clip, you will mainly use the Clip Creation buttons available in the Player area.

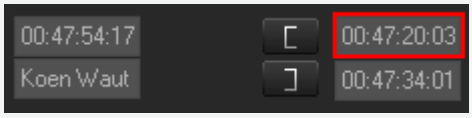
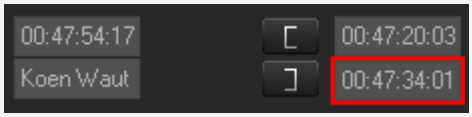
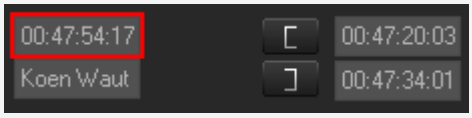
Clip Creation Commands

The following table gives the meaning of each clip creation operation. A button and/or a keyboard shortcut can be used to perform each action.

Button/Field	Keyboard Shortcut	Operation and Description
[	E or I	**Mark IN** Sets a mark IN point at the nowline position on the media bar: • the timecode value is added in **Mark IN TC** field. • a **[** sign is shown on the video display • a green mark is added at this timecode on the media bar.
]	R or O	**Mark OUT** Sets a mark OUT point at the nowline position on the media bar: • the timecode value is added in **Mark OUT TC** field. • a **]** sign is shown on the video display • a red mark is added at this timecode on the media bar.
		**Clip Name** Field where the clip name can be entered.

Time Information Fields

The following time information is displayed as follows next to the transport and clip creation commands.

Field	Meaning
	**Mark IN TC** Timecode of the Mark IN defined on the loaded media.
	**Mark OUT TC** Timecode of the Mark OUT defined on the loaded media.
	**Nowline TC** Timecode of the nowline position on the loaded media.

Field	Meaning
	TC OUT of the loaded clip.
	Duration from the IN point to the OUT point: • If the clip is loaded from the thumbnail view, it displays the duration of the source clip. • If the clip is loaded from the storyboard, it displays the duration of the storyboard clip.

To move the mark IN, mark OUT or nowline to a given TC, type the timecode in the corresponding field and press **ENTER**.

You can edit hours, minutes, seconds or frames separately in the timecode fields:

- Double-click on the hours, minutes, seconds or frames area, and the corresponding area will be activated for editing.
- Simple-click in the timecode field, the cursor should blink on the right and you can type the full timecode value.

How to Make a Clip

Using the transport controls listed above, you can create a clip as follows:

1. Select the requested media from the nearline or from a bin and double-click on it or drag it to the Player area. It will open in the Player.
2. Play the media using the transport control commands described in section "Transport Commands in the Player" on page 71.
3. Position the nowline at the requested position for the Mark IN point and click the **Mark IN** button .
4. Position the nowline at the requested position for the Mark OUT point and click the **Mark OUT** button .
5. Enter a name in the **Clip Name** field.
6. To save the clip, drag it to a bin in the Tree view.

   The Save Clip window opens.

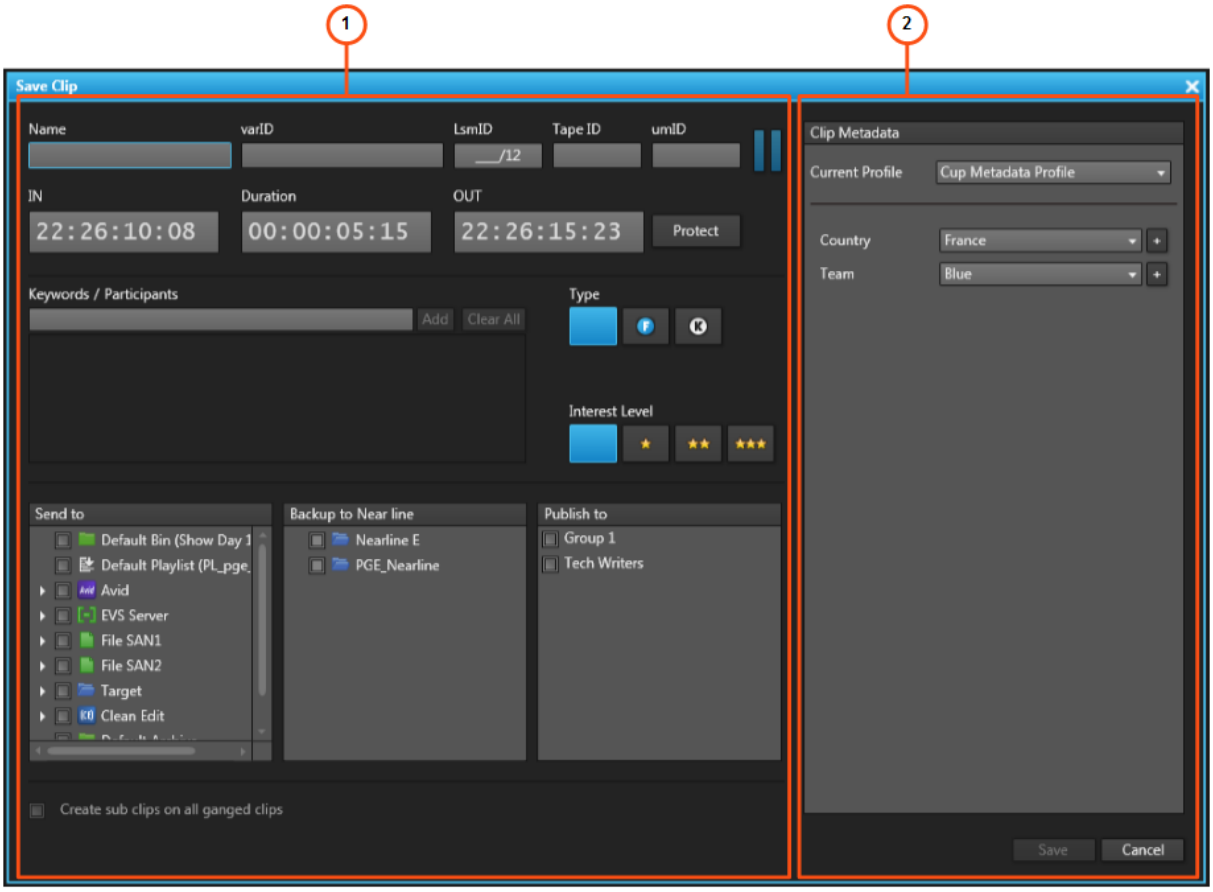
Note
If you press **CTRL** when dragging the clip to the bin, the Save Clip window does not open. The clip name will be the one entered in the **Clip Name** field or it will be the creation date if the field has been left empty.

7. Enter data for the clip in the Save Clip window.

Note
If you do not want to place the media directly in the timeline, ensure that the **Fill** button is not active . You will be able to place it later on in the timeline.

Save Clip Window Overview

The Save Clip window contains the areas highlighted on the screenshot below:



The Save Clip window is divided into two panes:

1. The left pane contains the clip information, i.e. general clip data.

   It is always displayed.

2. The right pane contains the clip metadata, i.e. clip data based on customer-defined user fields.

   It is displayed by clicking the right area in the **Pane Display** button .

Fields in the Save Clip Window

Clip Information Pane

The Clip Information pane contains the following user interface elements.

Name
User-defined name for the item. It can contain up to 64 alphanumeric characters.
It is mandatory.

VarID
VarID is a 32-character ID with variable length and format. It is automatically assigned to a new item. It is mainly used to ensure redundancy on the system. It can be unique for a clip on the EVS server level or on the XNet network level, depending on EVS video server settings.

LSM ID
ID identifying the clip position in the XNet network. This numbering is based on the numbering of the LSM operational mode.
If you enter a requested position that is already used, the application will display an error message. You will have to enter a new position.
If you do not enter an ID, an ID is automatically assigned by the system.

Tape ID
This identifies the tape on which the item is stored.

UmID
Unique Material Identification. UmID is a fixed length 8–character ID. The EVS server automatically assigns a UmID to each new clip. It is used for the unique identification of a clip on an XNet network.

Protect / Unprotect
Button that allows the users to protect or unprotect the clip.
A message will warn the users in IPDirector or in Multicam not to delete the protected clip.
When the Protect status is selected, the button is highlighted.
A **Protect** icon appears next to the **Protect** button when the clip is protected by the IPDirector protocol.

Keywords
This area allows you to assign up to five keywords to an item to qualify its content.

Type buttons
The **Type** buttons allow you to assign a type to a clip for use with Key and Fill operations.
The background of the button corresponding to the selected type is blue.
- The left button is used for normal items. This is the default value.
- The middle button is used for fill items.
- The right button is used for key items.

Interest Level buttons
The **Interest Level** buttons allow users to assign an interest rating to an item. Four interest levels can be defined, from no star to 3 stars. The background of the button corresponding to the selected interest level is blue. The default value is the no star level.

Send To
Destinations where the clip can be transferred to.
The available targets are the targets set from the Remote Installer and the Xsquare targets set from Xsquare.
Select the check boxes corresponding to the requested destinations.

Backup to Nearline
Only displayed when a XT hi-res clip is present in the clip.
Nearline directories destinations where the clip can be transferred to.

Restore to XT
Only displayed when no XT hi-res clip is present in the clip.
Lists all the hi-res EVS servers and their pages.
If you select the root of a server, the clip is restored to the default page.
If you select a specific page, the clip is restored to that page.

Publish To
User groups to which the clip can be published, i.e. made available.

Create sub clips on all ganged clips
If the clip used to create a sub-clip is part of a group of linked clips, this option will create sub-clips from all the linked clips.

The Clip Information pane also displays the IN point, OUT point and duration of the clip as read-only information.

Clip Metadata Pane

The Clip Metadata pane contains the following fields:

Current Profile
Drop-down list from which the users with appropriate user rights can select the metadata profile to be associated with the item.

Metadata Profile fields
Fields belonging to the metadata profile selected in the **Current Profile** field.
The users can modify the values of the **Metadata Profile** fields, if they have appropriate user rights. The modifications will only apply to the given item and not impact the default values of the profile.

7.2.8. Selecting the Tracks to be Added to the Timeline

Possible Audio Configurations

The IPD Xedio Plugin can manage the reading, the editing and the export of files with up to 16 audio channels. These channels can be grouped in stereo pairs and/or 5.1 groups, or be mono channels.

The possible audio configurations are multiple and are a combination of mono, stereo and/or 5.1 audio tracks, with a maximum of 16 channels.

Within the general settings of Xedio Manager, you need to select the **Enable 5.1 tracks** parameter to allow the management of 5.1 tracks in the Xedio Suite, and the **Enable mono tracks** parameter to allow the management of mono tracks.

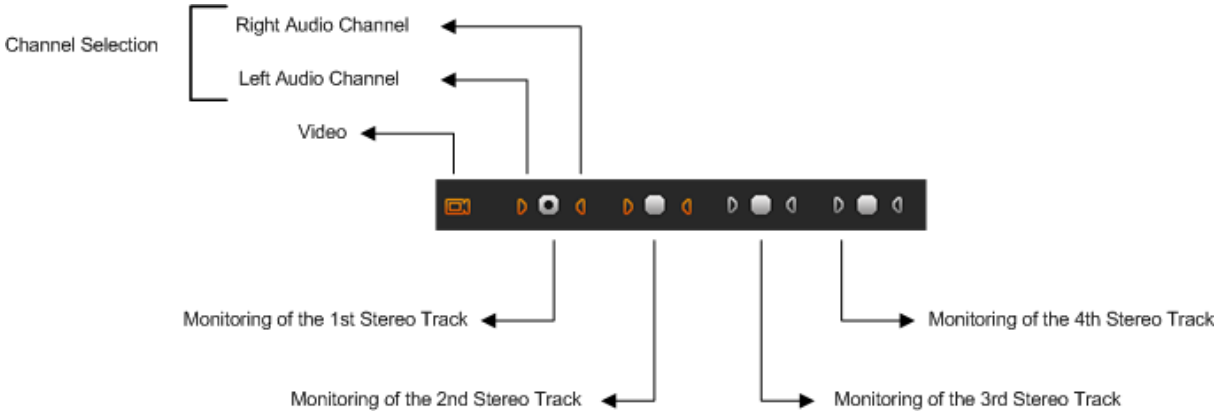
When importing files with 2, 4, 8 or 16 audio channels, the assignment must follow the default parameters set in the database, as explained in section here above. In case the default assignments cannot be applied, all audio tracks will be considered as stereo pairs.

Video and Audio Monitoring Tools

Overview of the Video and Audio Tracks

The video and audio channels of a loaded source file are represented below the Video Display of the Player in the form of **Track Selection** buttons.

Here is an example with 4 tracks of stereo channels:


Channel Selection
Right Audio Channel
Left Audio Channel
Video
Monitoring of the 1st Stereo Track
Monitoring of the 2nd Stereo Track
Monitoring of the 3rd Stereo Track
Monitoring of the 4th Stereo Track

The different types of audio tracks of a loaded clip are displayed as follows:

- A **mono track** is represented by
- A **stereo track** is represented by .
- A **5.1 track** is represented by

Note
If the loaded clip contains more than 8 audio tracks, only the first 8 tracks are displayed under the Video Display. A first click on the button allows to display the additional tracks.

Video and Audio Tracks Selection

When you create a clip to be placed on a timeline, you need to select the video and the requested audio channels.

Selection of the Video Channel

The **Video** button is clicked to select or remove the video. So the clip made contains, or not, the video.

Selection of an Audio Channel

The left and the right loudspeaker buttons of an audio stereo track are used to select or remove respectively the left or the right channel of the corresponding audio track:

Clicking the left audio button will remove the left audio component from the source so that the clip made has no left audio channel. In this case, the right channel will be output on the left and right channels.

Clicking both left and right audio buttons will also remove the right audio component so that the clip made has no audio channel for this track.

A mono track is removed from the selection by clicking the loudspeaker button on the right of the radio button:

A 5.1 audio track is removed from the selection by clicking the loudspeaker button on the right of the radio button:

The next table summarizes how the buttons look like depending on the selection:

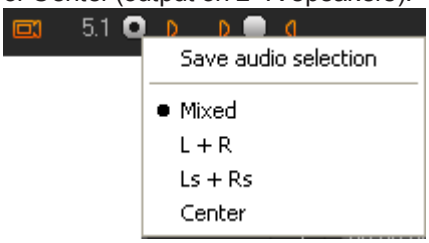
	Selected	Removed
Video		
Audio		

Selection of the Track for Audio Monitoring

When you create a clip to be placed on a timeline, you need to select the audio track that will be monitored when playing the loaded clip.

The radio buttons displayed between each pair of stereo channel buttons or next to a mono or 5.1 audio channel button allow the selection of one audio track for monitoring:

Note
When you right-click on a 5.1 radio button, a popup menu appears in which you can select the 5.1 components that should be monitored on the left and right channels. You can choose between the following options: Mixed, L+R, Ls+Rs or Center (output on L+R speakers).



Audio meters located on the right side of the Video Display represent the audio channels of the monitored track.

See section "Audio Meters / Trim Pane" on page 93.

7.2.9. Adding Logs to the Media Loaded on the Player Area

Introduction

A log is a reference point to a specific frame in a video sequence. The log is identified by a TC value, and relates to an action in a given event. It can be associated to metadata related to the event (keywords and/or a ranking, for example).

Their purpose is to mark points of interest on the media and to facilitate rapid movement between them.

Whenever you want, you can add logs to the material loaded on the Player pane.

In IPD Xedio Plugin, two types of logs can be displayed:

- internal logs are added to the media by the CleanEdit user
- external logs have been added to media in IPDirector.

Internal and External Logs

Definition and Display

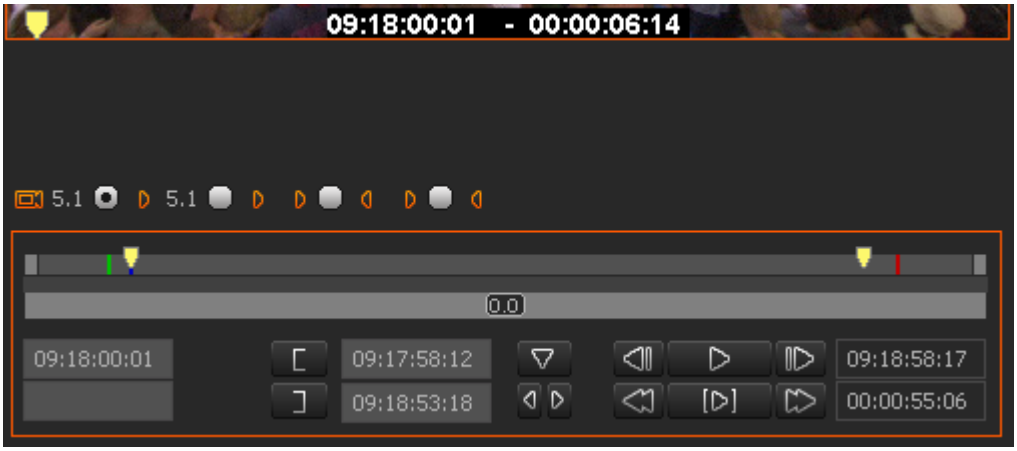
Internal Logs

The **internal logs** are placed by the user on the media loaded on the Player.

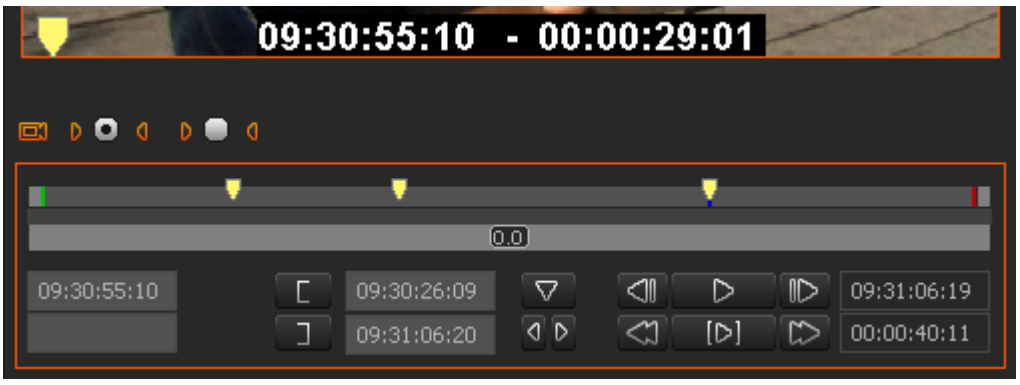
They are shown on the media bar as yellow triangles.

When the nowline is on an internal log timecode, a yellow triangle appears at the bottom of the video display.

Example with a 16:9 aspect ratio:



Example with a 4:3 aspect ratio:



External Logs

The **external logs** correspond to logs created in IPDirector. An interest level is assigned to them.

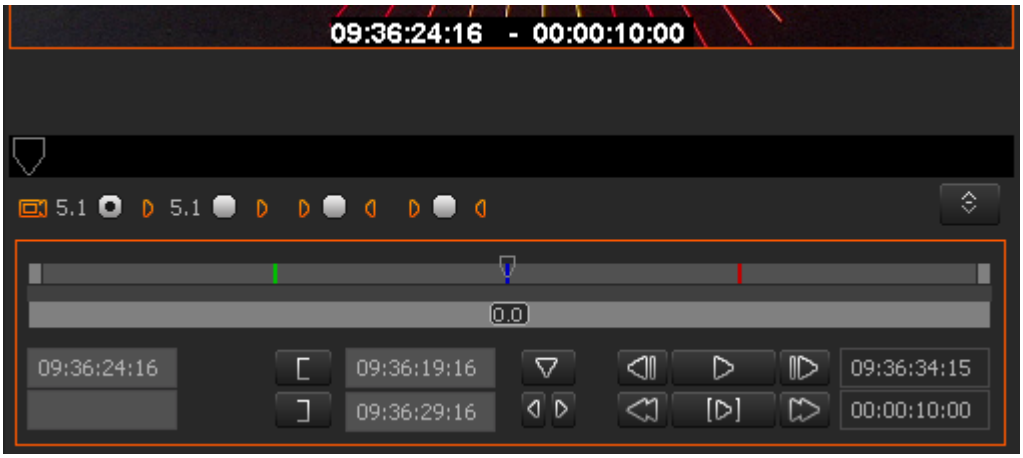
External logs are shown on the media bar as transparent triangles.

The log will have a different color depending on the interest level assigned in IPDirector:

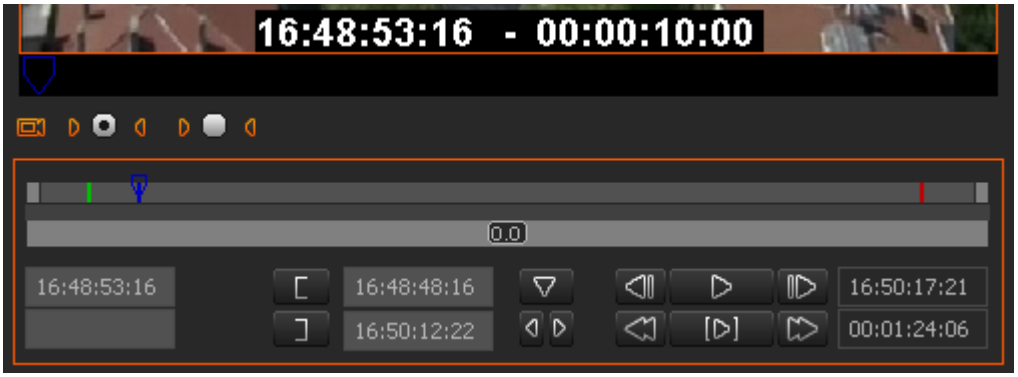
- White log for no-star rating (default)
- Blue log for 1-star rating
- Green log for 2-stars rating
- Red log for 3-stars rating

There is always a black stripe below the video display when external logs are present in the loaded clip. When the nowline is on an external log timecode, a transparent triangle appears on the left of this black stripe.

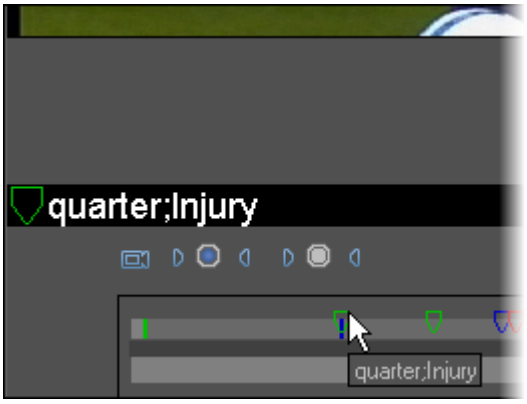
Example with a 16:9 aspect ratio:



Example with a 4:3 video aspect ratio display:

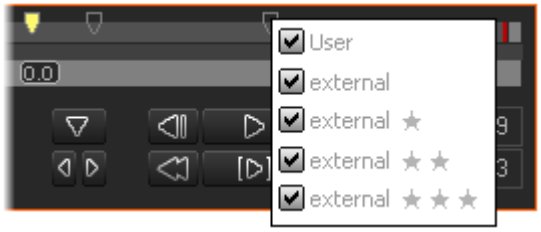


Once the nowline is positioned on an external log timecode, the keywords associated to this log are listed below the video display, next to the log triangle, and are displayed as a tool tip when you roll the mouse over the log on the media bar:



Logs Display Selection

When you right-click on a log on a media bar where the two types of logs are displayed, a contextual menu appears and let you select the logs that should appear:



Internal logs are also called user logs.

Possible Actions on Logs

Adding a Log

1. Place the nowline at the requested position on the media
2. Click the **Add Log** button .

The log is added on the media as a yellow triangle on the media bar.

Moving from one Log to the Other

- Click the **Go to Prev. Log** button to move to the log positioned on the left of the nowline.
- Click the **Go to Next Log** button to move to the log positioned on the right of the nowline.

Deleting a Log

When the nowline is positioned on a log (using the buttons) you can delete it by:

- simultaneously pressing **CTRL** and clicking .

External logs cannot be removed from IPD Xedio Plugin.

7.3. Recorder Pane

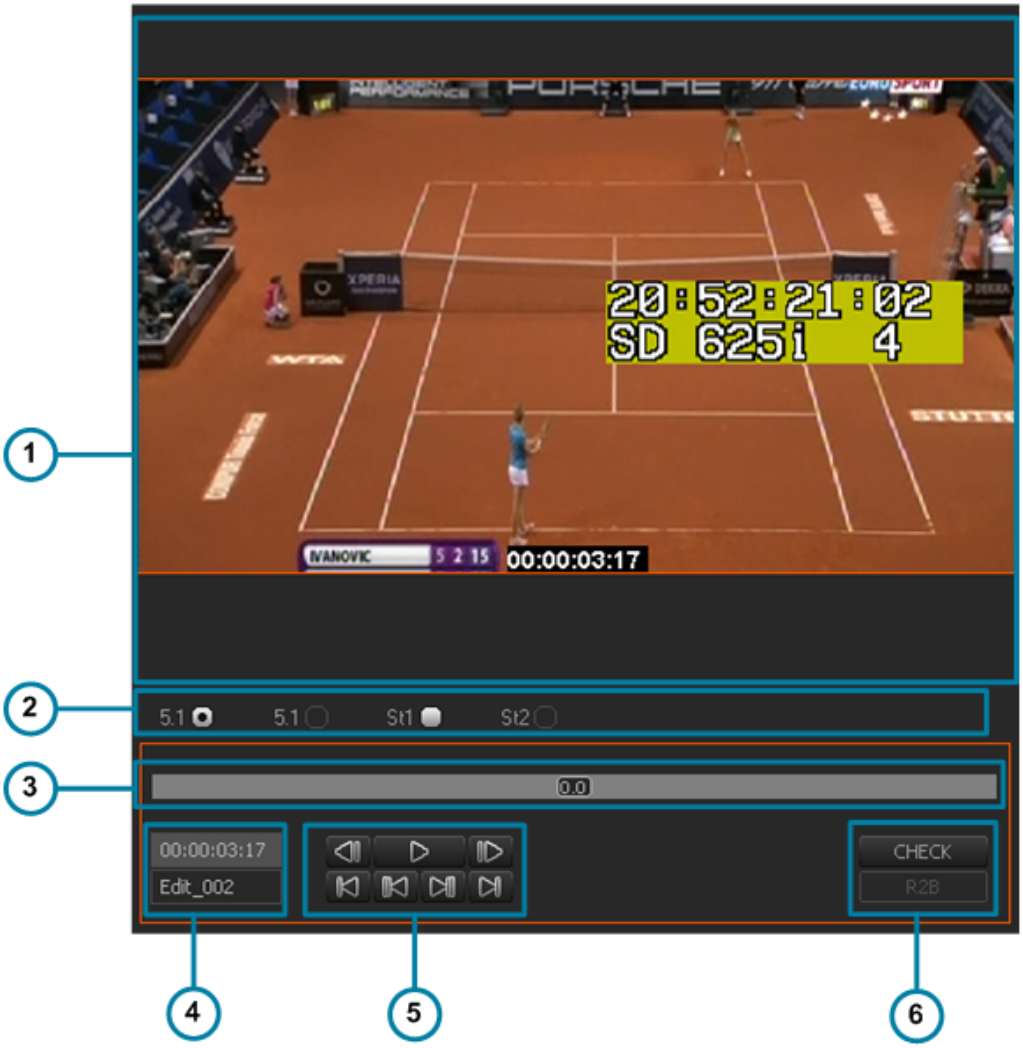
7.3.1. Overview

Introduction

The Recorder pane allows you to preview edits and to browse through the timeline. The commands on the Recorder area are only available when an edit is open. The Recorder area interacts with the timeline as the two areas are different representations of the same edit. The timeline provides a graphical representation and the recorder, a visual area to actually view the media represented on the timeline.

Illustration

The Recorder pane contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the Recorder pane:

Part	Name	Description
1.	Video Display	It displays the video material loaded on the Timeline. Everything that is outside the video content has the skin color. Video such as letterboxed or pillarboxed video will show black bars as these mattes are part of the video signal. Parameters related to the display are available via a contextual menu. See section "Video Display Options" on page 68.
2.	Track Monitoring Buttons	They reflect the audio type and tracks of the loaded edit and allow the selection of the audio track you want to monitor. See section "Selecting the Monitored Audio Track for an Edit" on page 92.
3.	Jog	It allows the users to navigate in the loaded material. See section "Playing the Edit in the Recorder Pane" on page 89.
4.	Edit Information	These fields provide general information on the loaded edit. See section "Playing the Edit in the Recorder Pane" on page 89.
5.	Transport Control Buttons	They are used to play the media represented in the timeline. See section "Playing the Edit in the Recorder Pane" on page 89.
6.	Validation Buttons	They are used to check the edit or flag it as ready to broadcast. See section "Checking the Edit in the Recorder Pane" on page 92.

7.3.2. Activating the Recorder Area

To be able to use the Recorder and the various commands it features, you need to activate it. To activate the Recorder, click on the Recorder area or press on the keyboard.

An orange rectangle displayed around the Recorder commands indicates that the Recorder area is active.

7.3.3. Making the Recorder Area Full Screen

To view the Recorder area as a full-screen image, press on the keyboard.

Press again to revert to the normal display.

7.3.4. Adjusting the Recorder Video Display

You can adjust the Recorder video display via a contextual menu. You call the contextual menu by right-clicking the Video Display zone on the Recorder area.

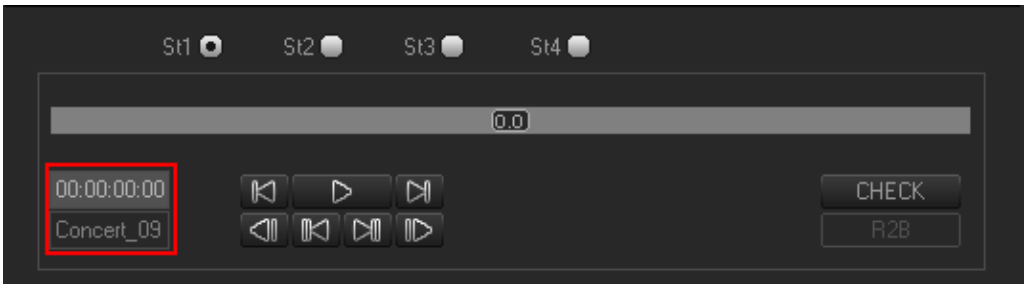
The display options are similar to the ones of the Player Video Display. See section "Video Display Options" on page 68 for more information.

7.3.5. Playing the Edit in the Recorder Pane

Edit Information

Two fields on the Recorder area highlighted on the screenshot below provide general information on the edit loaded on the Recorder:

- The upper field specifies the nowline position in the edit.
- The lower field specifies the edit label.



Transport Commands in the Recorder

The following table gives the meaning of each transport operation which can be used in the Recorder area. A button and/or a keyboard shortcut can be used to perform each action.

For a full list of commands activated via a shortcut key, refer to "Appendix 2 – Keyboard Shortcuts" on page 234.

Note
The user can customize the keyboard shortcuts in Xedio Manager to perform transport control commands. The keys mentioned below are the default settings.

Button	Keyboard Shortcut	Function Name and Description
	(space bar)	**Play/Stop** Start/stops the playback or preview (video and/or audio) of the edited material on the timeline from the nowline position. The button changes to a **Stop** button when the media is being played.
	Home	**Go to Beginning** Moves from the current position to the beginning of the edit loaded on the timeline.
	End	**Go to End** Moves from the current position to the end of the edit loaded on the timeline.
	A or Page Up	**Go to Previous Transition** Moves to the previous edit point on the timeline (considering the selected tracks).
	S or Page Down	**Go to Next Transition** Moves to the next edit point on the timeline (considering the selected tracks).
	# 3 or ←	**Go to Previous Frame** Moves 1 frame before the current position in Pause mode.
	$ 4 or →	**Go to Next Frame** Moves 1 frame after the current position in Pause mode.

The J, K and L keyboard shortcuts are used to navigate (in a combination of shuttle and scrub at the same time) backwards and forwards in A/V content.

The following table lists their different uses.

Keyboard Shortcut	Function Description
J	Shuttles/scrubs backward at twice the real time speed. Pressing repeatedly the key will increase the shuttling/scrubbing speed in a loop: x1, x2, x3, x5, x8 and then back to x1. **Note** If another key is pressed between the J repetitions, the shuttle/scrub speed is reset.
K	Stops the preview of the A/V content.

Keyboard Shortcut	Function Description
L	Shuttles/scrubs backward at twice the real time speed. Pressing repeatedly the key will increase the shuttling/scrubbing speed in a loop: x1, x2, x3, x5, x8 and then back to x1. **Note** If another key is pressed between the L repetitions, the shuttle/scrub speed is reset.
Hold K **+ tap** J	Steps backward 1 frame at a time.
Hold K **+ tap** L	Steps forward 1 frame at a time.
Hold K **+ hold** J	Plays backward at 33% of the real time speed.
Hold K **+ hold** L	Plays forward at 33% of the real time speed.

Note
The use of ShuttlePRO keys for transport functions is detailed in "Appendix 1 – ShuttlePRO" on page 233.

Jog Bar

The jog bar is the same in the Player pane and in the Recorder pane. In the Player pane, it is the bottom bar, under the Media bars.

Dragging the speed indicator on the jog bar allows you to move within the media at a variable speed:

The speed varies depending on:

- the position of the speed indicator
- the speed range covered by the jog bar. The default range is set from -200% to +200%. This is set in Xedio Manager.

Audio can be heard when using the jog.

7.3.6. Selecting the Monitored Audio Track for an Edit

Number and Type of the Edit Audio Tracks

The output audio tracks are displayed under the Recorder Video Display.

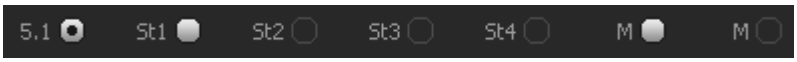
When a new edit has just been created, the number and type of output audio tracks are taken back from the previously created edit. At this step, no button is available.

Example with 8 stereo tracks:

Once the number and type of output audio tracks have been set and applied from the Output Channels area of the Audio Output Matrix, they are displayed under the Recorder Video Display but not available yet.

Note
If more than 8 audio tracks have been set for the output, only the first 8 tracks are displayed under the Video Display. A click on the button allows to display the additional tracks.

As soon as clips have been loaded on the timeline, all the output tracks corresponding to timeline tracks which contain audio are shown as radio buttons.



Selection of the Track for Audio Monitoring

The selection of the audio track you want to monitor is done by clicking one of the radio buttons.

A set of audiometers are displayed on the left side of the Recorder Video Display.

7.3.7. Checking the Edit in the Recorder Pane

The

button allows you to check the edit once it is finalized. The checks consist of identifying possible blanks in the edit or fast motion clips to be rendered, but also missing high resolution files in the edit. You need to check your edit before you can change its status to R2B (ready to broadcast). The **R2B** button will not become available in case holes are discovered in the edit or fast motion clips are not rendered.

See section "Checking the Edit" on page 22 for the description of windows and messages which are displayed in the different cases.

The

button allows you to change the status of your edit, and set it as "ready to broadcast". You will do this when you no longer want to modify your edit.

Once you click the **R2B** button, the manager can easily search for the R2B edits in Xedio Approval to approve or reject them.

Some automatic processes may also be launched when you click the **R2B** button, such as restoring the archived high resolution elements corresponding to the low resolution elements of the R2B edit.

7.4. Audio Meters / Trim Pane

7.4.1. Introduction

The audio meters are located between the Player and Recorder areas in an area shared with the trim operations possible on the timeline.

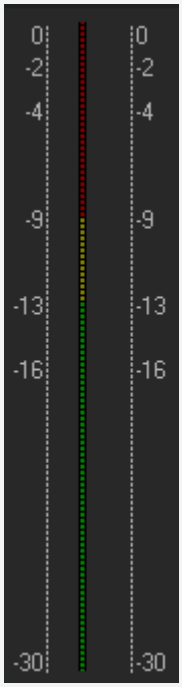
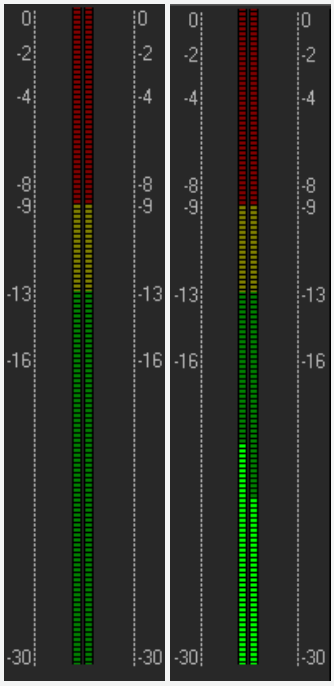
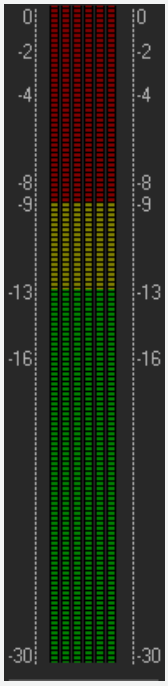
Clicking the button will toggle to the audio meter display.

Clicking the button will toggle to the Trim buttons. See section "Trimming Edit Points on the Timeline" on page 148 for more information on the trim functions.

7.4.2. Audio Meters

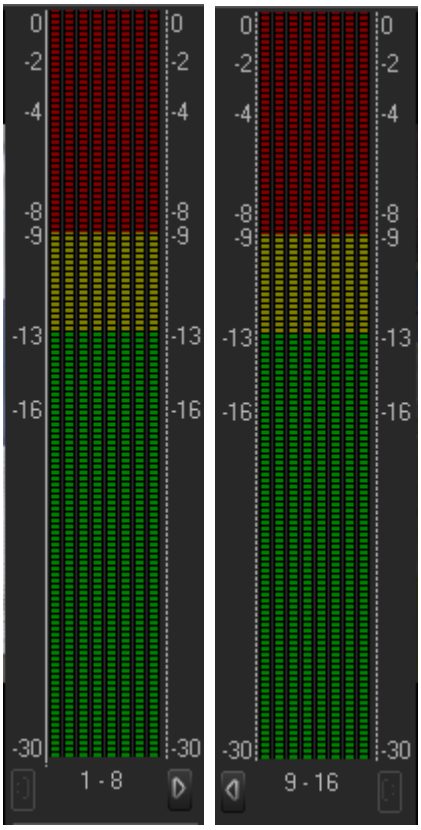
The audio display will follow the active window, Player or Recorder, as will the audio outputs.

When the Player area is active, the audio meters will only display the monitored track.

mono track monitored	stereo track monitored	5.1 track monitored
		

When the Recorder area is active, all the output tracks set from the Output Channels area of the Audio Output Matrix will be displayed in the audio meters.

If more than 8 channels are selected, the first 8 audiometers are visible at a time and two arrow buttons allow to shift from channels 1 to 8 to channels 9 to 16:



Db values are displayed on each side. They correspond to the values defined in **Xedio Manager > Parameter Profiles > General > Vumeter** for the top level, the saturation level, the warning level and the bottom level. Values for 0, -2, -4, -8 and -16 are shown as well if they do not overwrite the database values.

7.5. Timeline Pane

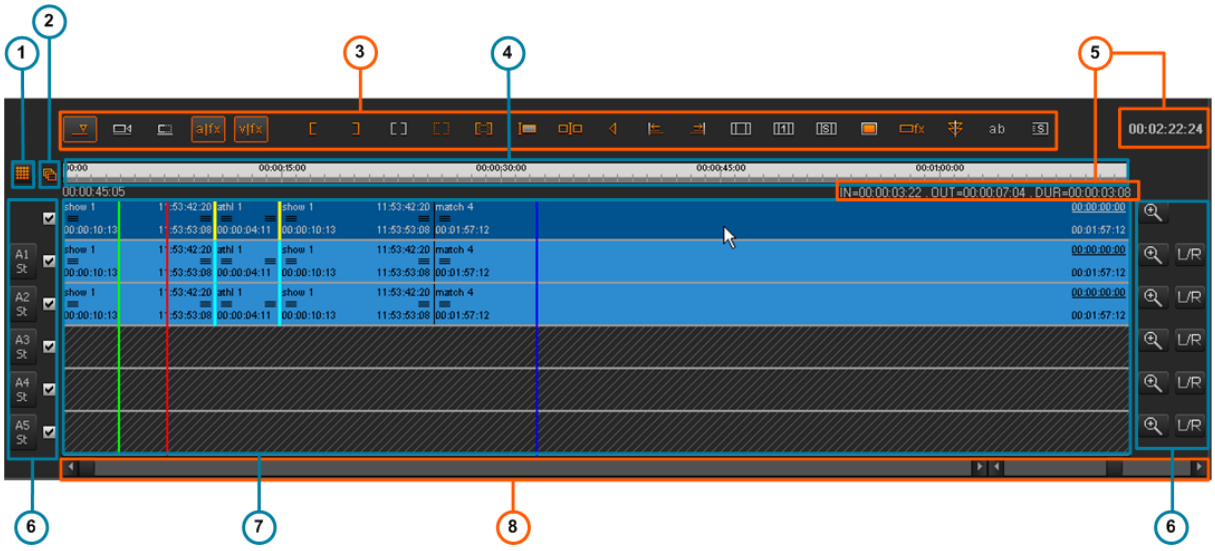
7.5.1. Overview

Introduction

The Timeline is the area where, through a graphical representation of the edit in progress, media can be manipulated to easily and efficiently make an edited package.

Illustration

The Timeline pane contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the Timeline pane:

Part	Name	Description
1.	Audio Output Matrix Button	This button gives access to an Audio Output Matrix used to define which timeline track will be routed to which output track. See section "Audio Track Selection for the Output" on page 109.
2.	Fill Button	When the **Fill** button is active, the media dragged to the Clip zone is automatically placed at the end of the timeline. See section "Placing Clips onto the Timeline" on page 121.
3.	Editing Commands	The Editing buttons allow the users to perform various editing actions on the edit loaded. See section "Editing Buttons in the Timeline Area" on page 114.
4.	Timecode Bar	The Timecode bar gives a graduation of the timecode of the edit. See section "Timecode Bar" on page 97.
5.	TC and Duration Fields	The timecode and duration fields provide time information on the position of the mark IN, mark OUT, full edit duration, or duration between marks. See section "Timecode and Duration Fields" on page 105.
6.	Track Selection and Audio Settings	The buttons for track selection on the left of the track are used to select: • the tracks to be taken into account in an editing operation • the audio output (and mode) in playout, rendering, and export actions. The buttons on the right of the track are used: • to define the audio routing for stereo tracks • to zoom the track, and perform fine tuning on the audio tracks. See section "Audio Track Selection and Settings in the Timeline" on page 107.
7.	Timeline Display	This is a graphical representation of the edit, in which users execute and visualize the editing actions. See section "Reference Positions on the Timeline Display" on page 98.
8.	Scale Bar and Move Bar	The Scale bar and Move bar allow the user to easily navigate in the timeline. See section "Scale Bar and Move Bar" on page 97.

7.5.2. Timecode Bar

The timecode bar, located above the timeline display, displays a graduation of the timecode in the timeline. The timecode of the first frame will start with the timecode defined when the edit was created.

The most precise graduation is a graduation by frame, i.e. from frame 0 to 24 in PAL, and from frame 0 to 29 in NTSC.

The timecode bar displays the tags (graphics) and the cue points (reference marks). Right-clicking the timecode bar opens the contextual menu from which you can define tags and cue points. See sections "Cue Points" on page 138 and "Adding a Logo or Graphic" on page 199 for more information.

7.5.3. Scale Bar and Move Bar

Scale Bar

The **Scale** bar, located below the timeline display on the right hand side, makes it possible to zoom in and out on the timeline:

- To zoom in, drag the slider to the left or rotate the mouse wheel down.
- To zoom out, drag the slider to the right or rotate the mouse wheel up.

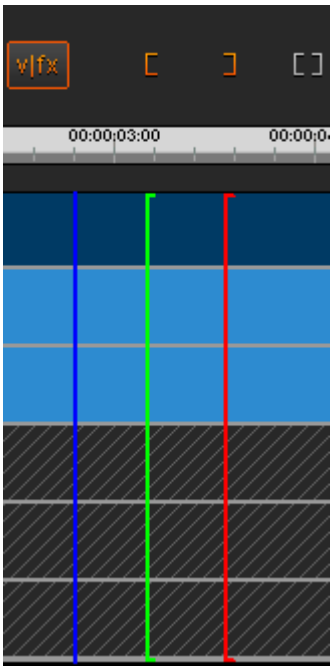
Move Bar

The **Move** bar, located below the timeline display on the left hand side, makes it possible to move within the timeline when the whole timeline is not displayed in the timeline pane at the defined scale.

7.5.4. Reference Positions on the Timeline Display

Overview

The following marks can be placed to define a specific position in the timeline and to be used in editing operations:



Nowline

This is the blue vertical marker that displays the current position on the timeline. It is used to browse in the timeline or mark an insertion position.

Mark IN / Mark OUT Points

The mark IN point is a green vertical line on the timeline that displays the position of a mark IN point.

The mark OUT point is a red vertical line on the timeline that displays the position of a mark OUT point.

You will add mark IN and mark OUT points to help you place media in the timeline.

7.5.5. Timeline Element on the Timeline Display

Description

The timeline element is the portion of the media added to the timeline and displayed as a block on the timeline. It corresponds to one track of a clip added to the timeline:

Default Displayed Information

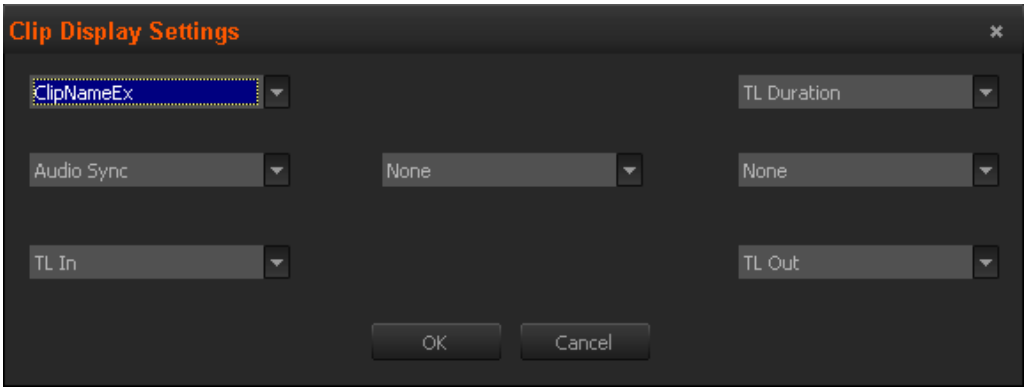
The element display on a track can contain up to seven information fields. By default, the information displayed is the following:

Position	Information Displayed
Top left	Clip name
Top right	Element duration
Bottom left	TL TC IN (TC IN of the element in the timeline)
Bottom right	TL TC OUT (TC OUT of the element in the timeline)

Modifying the Default Information

The default information can be modified via the **Settings > Clip Display Settings** command from the **Timeline Element** contextual menu available when you right-click in the timeline display.

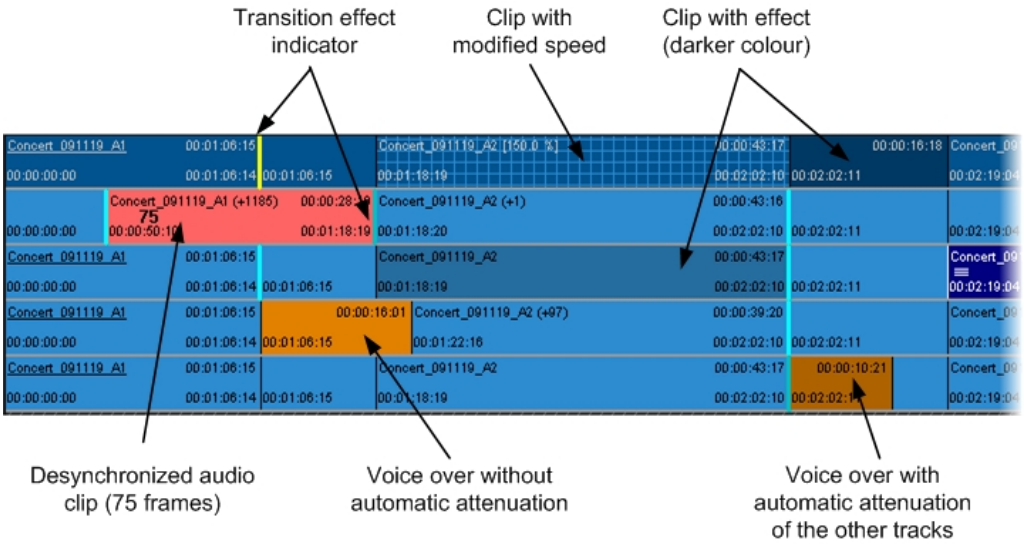
This calls the Clip Display Settings window where you can specify which information should be displayed on the timeline elements:



7.5.6. Color Representation on the Timeline Display

Overview

To assist in recognizing the processes and different actions that have been performed on the timeline, various colors and types of shading are used.


Transition effect indicator
Clip with modified speed
Clip with effect (darker colour)
Desynchronized audio clip (75 frames)
Voice over without automatic attenuation
Voice over with automatic attenuation of the other tracks

Note
The colors of the tracks can look differently on your screen depending on your settings. The default colors of the timeline tracks can be changed in Xedio Manager, via Software > Parameter Profiles > (Xedio) CleanEdit: TL Colors tab.

Colors on the Video Track

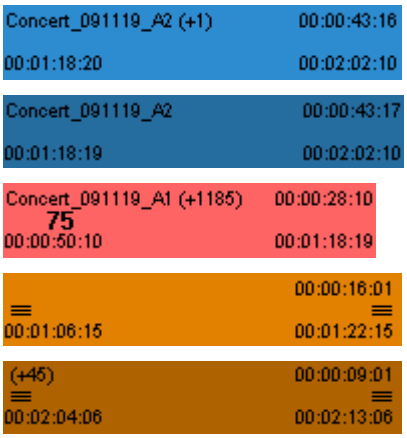
Video element with no applied effects

Video element with speed other than 100%

Video element with FX (darker blue element than normal)

Video element with a freeze frame

Colors on the Audio Track



Normal audio element in sync with an associated video

Normal audio element with FX

Audio element which has been moved out of sync with its associated video

Normal voice-over element

Voice-over that attenuates the other tracks (on the same output).

7.5.7. Contextual Menus for Timeline Elements

Introduction

You can access several commands for timeline elements via a contextual menu.

The contextual menu is available when you right-click on a selected video or audio element on the timeline.

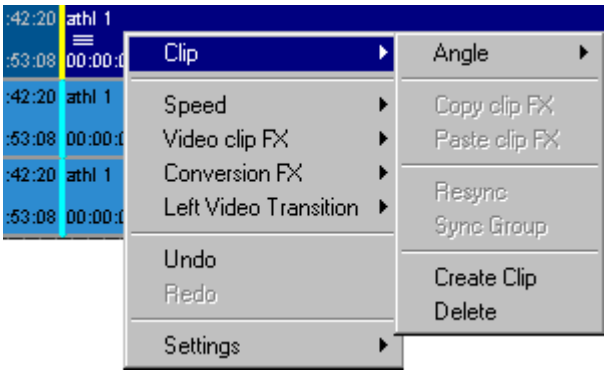
The commands available in the contextual menu vary depending on:

- Whether you right-click on a video or audio element
- Whether the element is selected or not
- Where the mouse cursor is located when you right-click on an element

The various commands available from the contextual menu are shortly presented in the sections below. However you will find details on some of the commands in the relevant sections of the manual.

Commands Common to Video and Audio Elements

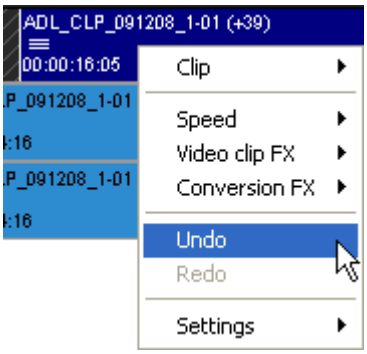
Clip Commands



The **Clip** commands in the contextual menu are available when you right-click on a selected video or audio element on the timeline. The actions are available for both video and audio elements, except the Angle option, only present for a video element:

Command	Description
Clip > Copy Clip FX	Copies the effects defined on the selected element.
Clip > Paste Clip FX	Pastes the effects (which have been copied using the Copy Clip FX command) onto the selected element.
Clip > Resync	Resynchronizes a selected desynchronized audio element with the video element that belongs to the same clip or to a synchronized group. See section "Resynchronizing Associated Clip Elements" on page 134.
Clip > Sync Group	Creates a synchronized group with the selected elements. When one of those synchronized elements will be moved, the other elements will move together and be kept synchronized. See section "Grouping Elements in a Sync Group" on page 137.
Clip > Create Clip	Saves the selected element as a clip in the Clip zone.
Clip > Delete	Deletes the selected elements

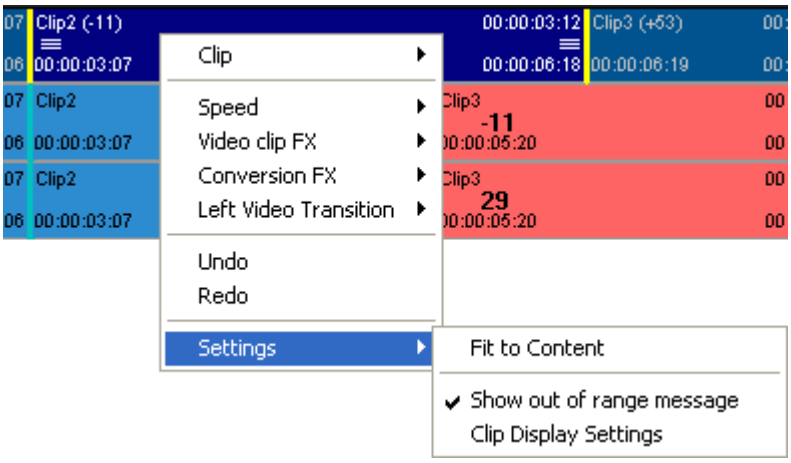
Undo/Redo Commands



The **Undo** and **Redo** commands are available on a selected video or audio element on which an editing action has been performed:

- The **Undo** command allows the user to cancel the editing action(s) that have been performed after the last save. You can also cancel the editing actions by pressing Z.
- The **Redo** command allows the user to reapply the editing action(s) that have been cancelled after the last save.

Settings Commands



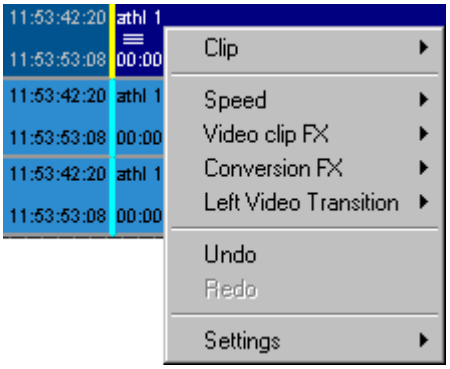
The **Settings** commands are available when you right-click on a video or audio element on the timeline, whether it is selected or not. The following actions are available:

Command	Default Keyboard Shortcut	Description
Fit to Content		When the edit expands beyond the timeline display, this command fits the whole edit into the timeline display.
Show out of range message	-	When the command is ticked, the application will display warning messages when no material is available to perform the requested editing action.
Clip Display Settings	-	Opens the Clip Display Settings window in which you can define which information will be displayed on the timeline elements. See section "Timeline Element on the Timeline Display" on page 99.

Commands Applicable to Video Elements

The **Clip > Angle**, **Speed**, **Video Clip FX**, **Conversion FX**, and **Left/Right Video Transition FX** commands are only applicable to selected video elements.

For more information on these commands, refer to the section "Replacing Clips by Linked Clips" on page 130 for the Clip Angle command, to section "Modifying the Playback Speed of a Clip Using the Speed Command" on page 146 for the **Speed** command, and to the chapter "Advanced Video Editing" on page 153 for the other commands.



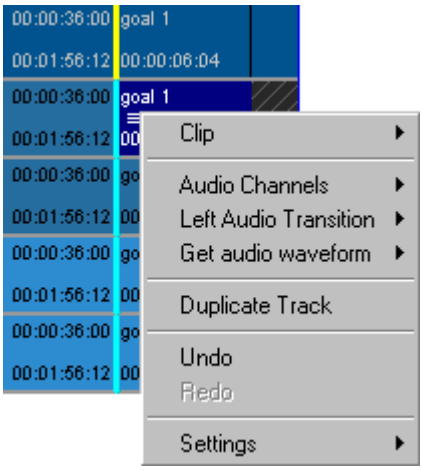
Commands Applicable to Audio Elements

The **Audio Channels, Right/Left Audio Transition, Get Audio Waveform**, and **Duplicate Track** commands are only applicable to selected audio elements.

The **Audio Channels** option is explained in section "Audio Routing, Swaps and Mutes" on page 183.

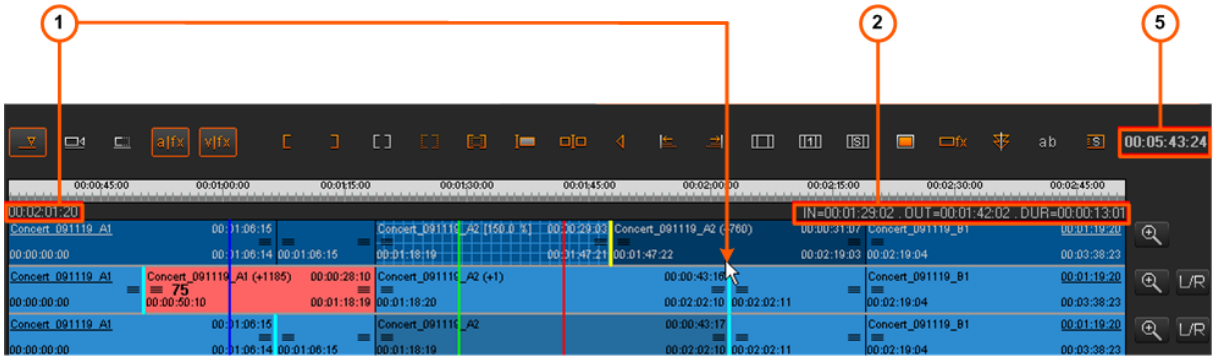
The **Right/Left Audio Transition** options are detailed in section "Adding Audio Transition Effects on Elements of the Same Track" on page 179.

The Get Audio Waveform and Duplicate Track features are explained in section "Miscellaneous Audio Features" on page 188.

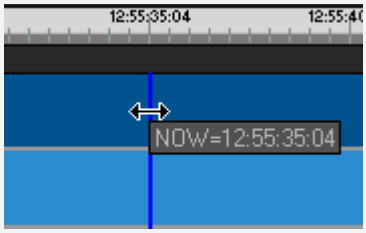


7.5.8. Timecode and Duration Fields

The timecode information displayed on the timeline display is shortly described below. These fields are not editable.



The following table explains the various TC and duration fields highlighted in the above screenshot.

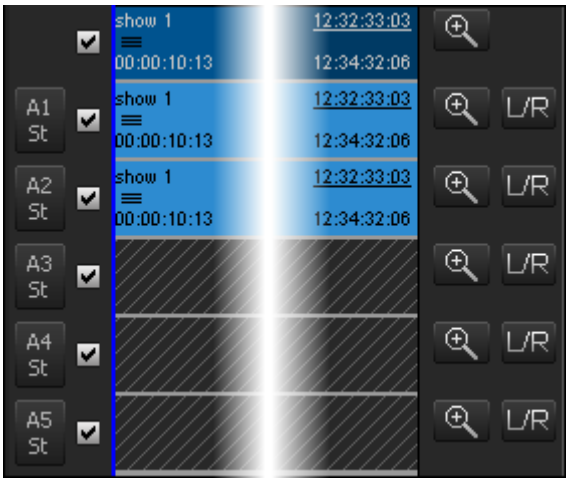
Part	Name	Description
1.	**Mouse Pointer TC**	When the mouse is on the timeline display, the timecode position of the mouse pointer is specified on the left above the timeline display.
2.	**IN/OUT/Duration fields**	**IN field (Mark IN TC)** The **IN** field, on the right above the timeline display, indicates the timecode of the mark IN position on the timeline, if any mark IN point is defined. A tooltip with the mark IN TC is also displayed when you position the cursor on the mark IN green line. **OUT field (Mark OUT TC)** The **OUT** field, on the right above the timeline display, corresponds to the timecode of the mark OUT position on the timeline, if any mark OUT point is defined. A tooltip with the mark OUT TC is also displayed when you position the cursor on the mark OUT red line. **DUR field (Duration IN/OUT)** The **DUR** field, on the right above the timeline display, corresponds to the duration between the mark IN and mark OUT points defined on the timeline.
3.	**Timeline Duration**	The **Timeline Duration** field, located on the right of the editing buttons, displays the effective duration of the timeline loaded, calculated from the start of the first element to the end of the last element.
-	**Nowline TC**	The timecode of the nowline appears as you position the cursor over the nowline:  This information is however not displayed as a field on the timeline display. If you want to position the nowline to a given TC of the timeline, type this timecode in the **Nowline TC** field of the Recorder Area and press **ENTER**.

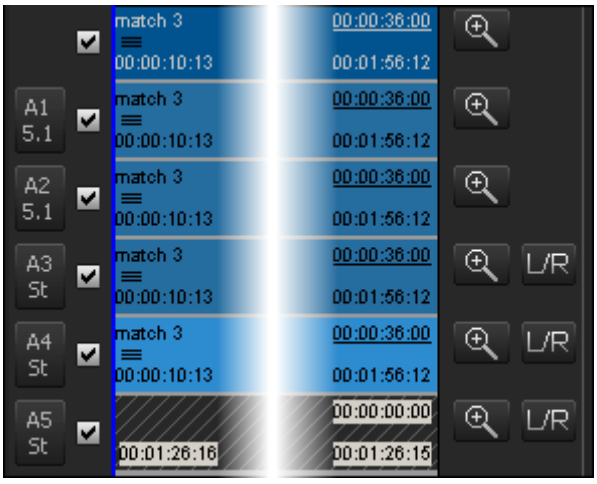
7.5.9. Audio Track Selection and Settings in the Timeline

Introduction

In the timeline display, 6 tracks are visible: 1 video track and 5 audio tracks. For each audio track, buttons are displayed on both sides of the displayed timeline track.

These buttons allow controlling some input and output settings used globally for each track, although elements placed on a track can always be treated individually.





Track Name and Audio Type in the Timeline

The top track represents the video track.

The other tracks represent the audio tracks which can be used in the timeline. Up to 5 audio tracks are available.

The upper part of the **Audio Track** buttons show the name of the audio track facing the button in the timeline display: from A1 to A5.

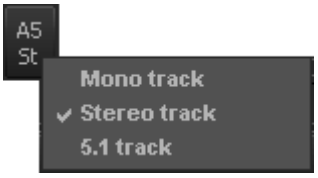
The lower part of the **Audio Track** buttons show the audio type of the timeline track:

- 5.1:

- strereo:

- mono:

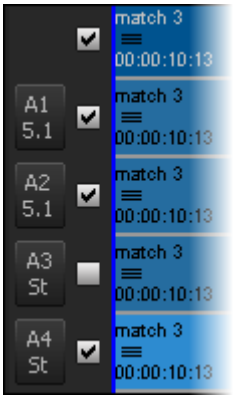
A right-click on each **Audio Track** button displays a contextual menu from which you can set the audio track type:



This can be done only if there is no element in the timeline track.

You can mute a track by clicking the corresponding **Audio Track** button. It will display the following icon:

Audio Track Selection for Editing Actions



The **Track Selection** check box is used to select the tracks to be taken into account when editing actions are performed (including playout, export and rendering actions).

If one **Track Selection** check box is cleared before the loading of a clip, you will not be able to load audio on this timeline track.

Video and Audio tracks can be selected by using the following shortcuts:

Track	Activation Shortcut
Video	F4
A1	Ctrl + F5

Track	Activation Shortcut
A2	Ctrl + F6
A3	Ctrl + F7
A4	Ctrl + F8
A5	Ctrl + F9
All Audio	Ctrl + * 8

Audio Track Selection for the Output

Introduction

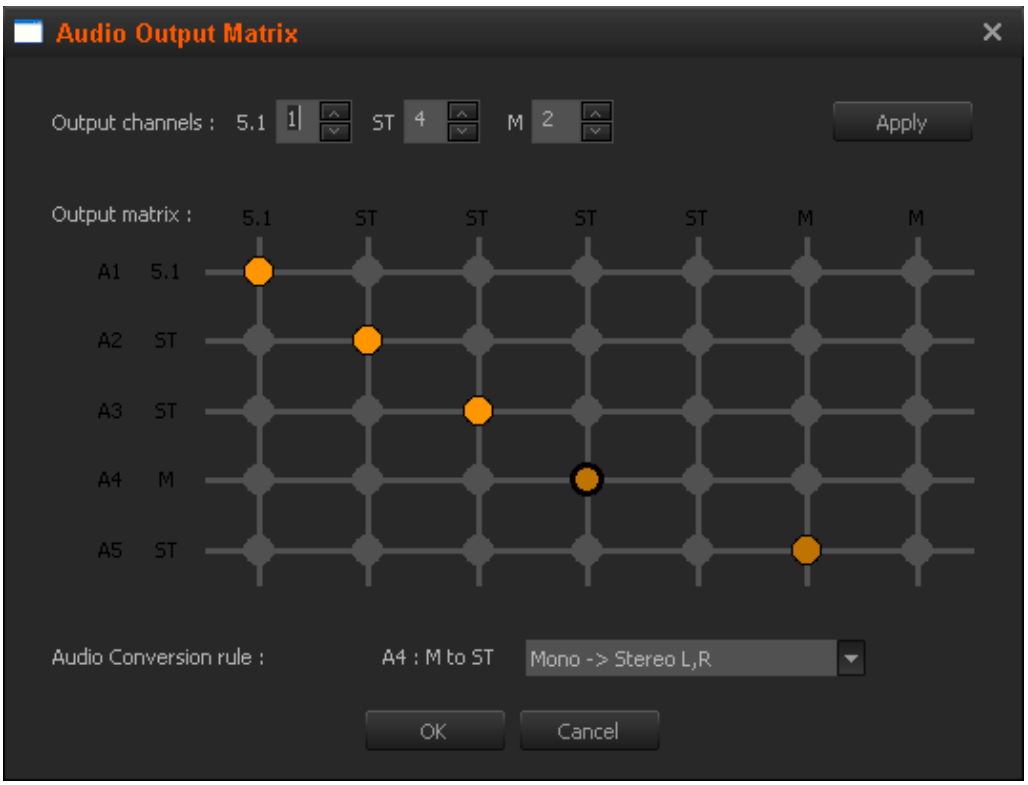
The number and type of the output audio tracks must be set from the Audio Output Matrix. This matrix is also used to define which timeline track will be routed to which output track.

This is taken into account for playout, rendering and export actions.

The Audio Output Matrix is accessed by clicking the **Audio Matrix** button .

Note
The **Audio Matrix** button is available only if the **Show Audio Matrix Button** parameter has been enabled in Xedio Manager > Parameter Profiles > CleanEdit > Timeline.

Overview of the Audio Output Matrix Window



Setting the Number and Type of Audio Output Tracks

The number and type of the audio output tracks is set from the Output Channels area.

1. Select the number of 5.1 tracks, stereo tracks and/or mono tracks.

   If the resulting number of audio channels exceed 16, you will not be able to apply the selection.

2. Click **Apply**.

The selection will be reflected under the Recorder Video Display as soon as the **OK** button will be clicked.

Setting the Routing between Timeline Tracks and Output Tracks

The routing from timeline tracks to output tracks is set from the Output Matrix area.

The timeline tracks are represented on the left, with their audio type as this has been set through the contextual menu each **Audio Track** button (mono, stereo or 5.1).

The output tracks are represented on the top of the matrix, with their audio type as this has been set through the Output Channels area.

To select the output track from which a timeline track will be played, click on an intersection in the grid.

Each selection is represented by a colored bullet.

Two cases can occur.

- Both the timeline track and the output track have the same audio type. This is represented with .

  Clicking the bullet remove it and thus clear the routing defined.
- The timeline track and the output track do not have the same audio type.

  a. This is represented with when the bullet is not selected.

  b. This is represented with when the bullet is selected (by clicking a non selected bullet). The audio conversion rule can therefore be established.

  Clicking once a selected bullet, or twice a non selected bullet, remove it and thus clear the routing defined.

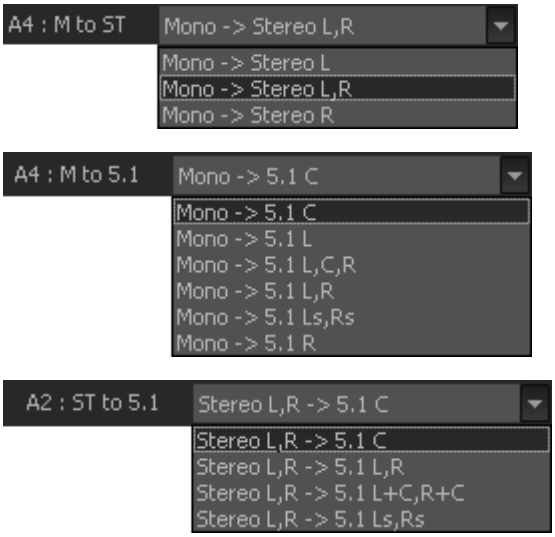
Setting the Audio Conversion Rule

When the timeline track is routed to an output track with a different audio type, a conversion rule must be set from the Audio Conversion Rule area.

- If the number of output channels is smaller than the number of timeline channels (5.1 to stereo or mono, stereo to mono), you will have to choose one of the conversion rules as follows:

A1 : 5.1 to ST
5.1 L+C,R+C -> Stereo L,R
5.1 C -> Stereo L (R=silence)
5.1 C -> Stereo L,R
5.1 C -> Stereo R (L=silence)
5.1 L,R -> Stereo L,R
5.1 L+C,R+C -> Stereo L,R
5.1 Ls,Rs -> Stereo L,R
A1 : 5.1 to M
5.1 C -> Mono
5.1 C -> Mono
A3 : ST to M
Stereo L+R -> Mono
Stereo L -> Mono
Stereo L+R -> Mono
Stereo R -> Mono

- If the number of output channels is larger than the number of timeline channels (mono to stereo or 5.1, stereo to 5.1), you will have to choose one of the conversion rules as follows:

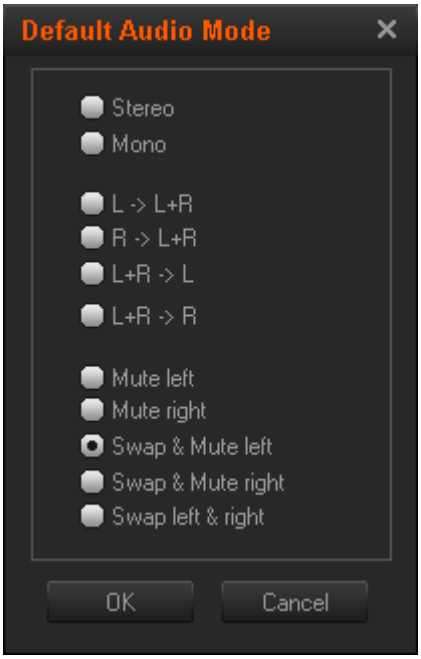

A4 : M to ST
Mono -> Stereo L,R
Mono -> Stereo L
Mono -> Stereo L,R
Mono -> Stereo R
A4 : M to 5.1
Mono -> 5.1 C
Mono -> 5.1 C
Mono -> 5.1 L
Mono -> 5.1 L,C,R
Mono -> 5.1 L,R
Mono -> 5.1 Ls,Rs
Mono -> 5.1 R
A2 : ST to 5.1
Stereo L,R -> 5.1 C
Stereo L,R -> 5.1 C
Stereo L,R -> 5.1 L,R
Stereo L,R -> 5.1 L+C,R+C
Stereo L,R -> 5.1 Ls,Rs

Warning
You need to select the check box on the right of the **Audio Track** button if you want to output the corresponding audio track. Otherwise, no material will be sent to the selected output track.

Audio Routing for Stereo Tracks

The **Stereo Routing** button allows defining default audio routing options for all new clips added to a stereo track in the timeline. These default routing options are defined for each stereo track, and are not available with mono and 5.1 tracks. If the button text is colored, it means that a routing option has been defined.

To define the audio routing, click the button to open the Default Audio Mode dialog box. Then select one of the possible settings:



Once you have defined the routing options:

- You will be asked whether you want to apply them to the clips present in the timeline (after confirming your choice).
- The options will automatically be applied to the new clips added to the timeline.

Track Zoom

The **Zoom** button expands the selected audio track in a **Zoom** view.

In the Zoom view, you can perform the following actions:

- Adjust cross fades on transitions. See section "Adjusting Audio Transitions" on page 183.
- Adjust audio levels of clips. See section "Audio Level Adjustments" on page 186.
- View the clip wave forms generated via the **Get audio waveform** command in the contextual menu. See section "How to Generate the Waveform of an Audio Element" on page 188.

7.5.10. Editing Buttons in the Timeline Area

The timeline buttons allow the users to place and manipulate clips on the timeline. In the table below you will find a brief description of these buttons but their operation will be detailed, wherever necessary, in the following sections.

The display of the individual buttons is enabled in Xedio Manager > Softwares > Parameter Profiles > CleanEdit > TI buttons.

Button	Keyboard Shortcut	Description
	Ctrl + Z or Esc	**Undo** button: to undo the last action performed on the timeline. When the button is available, it is colored.
	Ctrl + Y	**Redo** button: to redo the last action which has been undone on the timeline. When the button is available, it is colored.
	Ctrl + X	**Cut** button: cuts the selected clip(s) from the timeline.
	Ctrl + C	**Copy** button: copies the selected clips from the timeline.
	Ctrl + V	**Paste** button: pastes the cut or copied clips in the timeline, at the nowline position. The behavior depends on the Insert/Overwrite mode.
	V (toggle between modes)	Performing edit actions in **Insert mode** (white button) will shift the existing elements in the edit before the selected clip is placed into the edit.
	V (toggle between modes)	Performing edit actions in **Overwrite mode** (colored button) means that the result of the editing action will replace the content of an existing edit.

Button	Keyboard Shortcut	Description
	Z	When you delete a portion of the timeline with the **Delete & Clear** option active (white button), the area from which the element is deleted will remain empty after the deletion.
	X	When you delete a portion of the timeline with the **Delete & Shift** option active (colored button), any element located on the right of the deleted portion will be shifted to the left, so as to replace the deleted elements. Only the clips on selected tracks will be shifted.
	N (toggle ON/OFF)	When the **Blank Fill** button is active in Overwrite mode, the media placed into the timeline will fill in empty areas of the timeline.
	-	When the **AFX** button is active, the default audio transition is automatically added on each new clip placed into the timeline. The default audio transition effect is defined in Xedio Manager: Software > Parameter Profiles > (Xedio)CleanEdit > Timeline tab: DefaultAudioTransFx
	-	When the **VFX** button is active, the default video transition is automatically added on each new clip placed into the timeline. The default audio transition effect is defined in Xedio Manager: Software > Parameter Profiles > (Xedio)CleanEdit > Timeline tab: DefaultVideoTransFx
	-	When the **Auto Sync Tags** button is active, each new tag added to the timeline is automatically grouped to the video located just below.
	E or I	Clicking the **Mark IN** button marks an IN point at the nowline position on the timeline.
	R or O	Clicking the **Mark OUT** button marks an OUT point at the nowline position on the timeline.
	T	Clicking the **Mark Clip** button puts the mark IN at the beginning of the first element selected and the mark OUT at the end of the last clip selected.
	G	Clicking the **Mark Reset** button deletes the mark IN and marks OUT points.
	Ctrl + P	Clicking the **IN OUT Delete** button deletes the content of the timeline between the mark IN and mark OUT on the selected tracks (check box in front of the track).
	H	The **Select All** button allows selecting all the timeline elements from the nowline position on the selected tracks (check box in front of the track).

Button	Keyboard Shortcut	Description
		The **CTRL** + **Select All** button allows selecting all the timeline elements up to the nowline position on the selected tracks (check box in front of the track).
		When a mark IN and mark OUT are defined, the **SHIFT + Select All** button allows selecting the elements (whole elements) between the mark IN and mark OUT points on the selected tracks.
		The **Split** button allows dividing the selected timeline elements into two parts at the nowline position.
		The **Blank Clear** button allows deleting the common empty zones on the selected tracks from the nowline, preserving the synchronization between the different tracks.
	-	When at least two timeline elements are selected, the **Left** button allows aligning the selected elements on the left. It will take the last element selected as the reference position for the left-alignment.
	-	When at least two timeline elements are selected, the **Right** button allows aligning the selected elements on the right. It will take the last element selected as the reference position for the right-alignment.
	-	The **Extend** button allows extending or shortening a clip on the selected track(s), modifying its IN or OUT point to a position defined by a mark IN or mark OUT on the timeline. See section "Extending or Shortening a Clip" on page 141 for more information on the Extend function.
	-	The **Extend Still** button allows: • extending the IN point of a selected video element as a still frame (0% motion) up to a mark IN defined before the IN point. • extending the OUT point of a selected video element as a still frame up to a mark OUT defined after the OUT point. See section "Extending a Clip with a Still Frame" on page 144 for more information on the Extend Still function.
	-	The **Extend Speed** button allows: • extending the IN point of a clip up to a mark IN defined, without modifying its content. • extending the OUT point of a clip up to a mark OUT defined, without modifying its content. The effect achieved is a slow motion or fast motion clip. See section "Extending or Shortening a Clip by Modifying its Speed" on page 145 for more information on the function.

Button	Keyboard Shortcut	Description
	-	The **Color Insert** button allows replacing the timeline content by a color flash between a mark IN and mark OUT defined. The flash duration and color are defined by right-clicking the **Color Insert** button and selecting **Properties** from the contextual menu.
	-	The **Audio/Video Fx** button allows: • inserting colors on the video transition of the next or previous cut. See section "Inserting Blocks of Color Frames" on page 161. • modifying the audio levels. See section "Audio Level Adjustments" on page 186. • creating default audio transitions. See section "Adding Audio Transition Effects on Elements of the Same Clip" on page 181. Such audio effects can be performed on selected clips, on a whole audio track, or several ones. When you want to apply the effect on a whole track, remove mark IN or mark OUT, if any, and place the nowline at the beginning of the edit, clicking the **Home** key.
	-	The **Cue** button allows aligning audio or video events of different tracks on the nowline or to the cue points defined.
	-	The **ab** button allows inverting the audio clips between two audio tracks, from the nowline onwards. This option is enabled, when you position the nowline where requested, and select two audio tracks from the nowline.
	-	The **S** button allows you to render fast motion clips. This button is enabled as soon as a fast motion clip is detected in the timeline.

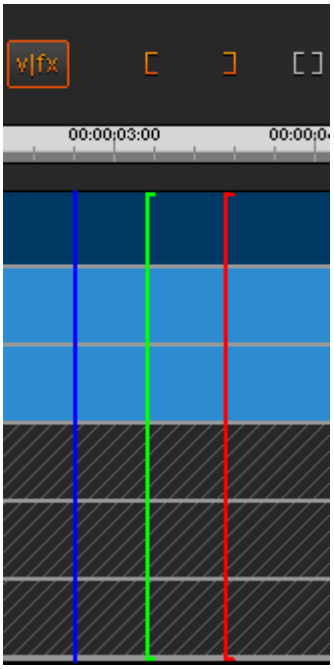
Note
The use of ShuttlePRO keys for editing functions is detailed in "Appendix 1 – ShuttlePRO" on page 233.

8. General Editing

8.1. Marking Positions on the Timeline

8.1.1. Adding Marks

Using the buttons displayed on the screenshot below, you can mark points to edit accurately on the timeline. You can use these marks to place your clips into the timeline, but also in many other editing actions.



The following marks can be defined in the timeline:

Name	Description	To define the mark, …
Nowline	Blue vertical line, which displays the current position on the timeline.	click on the timeline ruler where you want to place the nowline.
Mark IN	Green vertical line, which displays the position of a mark IN point.	place the nowline at the requested position and click the **Mark IN** button [.
Mark OUT	Red vertical line, which displays the position of a mark OUT point.	place the nowline at the requested position and click the **Mark OUT** button].

8.1.2. Adding Mark IN and Mark OUT Over Several Elements

You can also use the **Mark Clip** button to add a mark IN and a mark OUT points between selected elements.

Prior to click , click an element before which you want to place the mark IN and an element after which you want to place the mark OUT.

8.1.3. Removing Marks

Removing a mark IN

Press on the keyboard.

Removing a mark OUT

Press on the keyboard.

Removing the mark IN and mark OUT

Press on the keyboard or click the in the timeline.

8.2. Selecting Techniques

8.2.1. Selecting a Clip

How to Select One Clip Element

To select an element of a clip, just click it.

The color of the selected element will change to a dark blue (or as defined in Xedio Manager, via Software > Parameter Profiles > (Xedio) CleanEdit: TL Colors tab).

How to Select Multiple Clip Elements

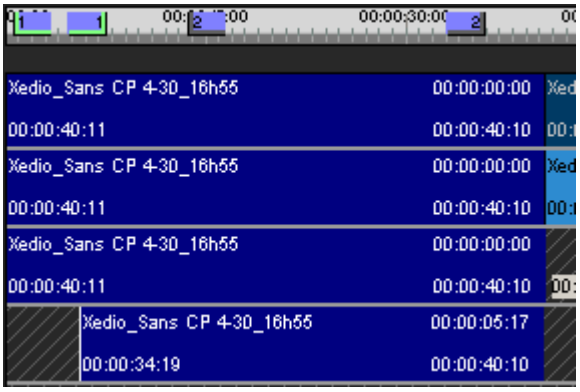
To select multiple elements for a common operation, press the **CTRL**key and click the different elements.

Tags can be selected together with video and/or audio elements. The selection order does not matter.

This operation can be performed, for example, to group elements in a Sync group.

How to Select a Group of Synchronized Elements

To select a whole group of synchronized elements at once, press **SHIFT** and click one of the elements (video element, one of the audio elements or a tag). All the synchronized elements, including tags if any, appear as selected:



8.2.2. Selecting Elements Depending on Nowline or Mark Positions

The following table shows how you can select elements from the nowline, up to the nowline or between the mark IN and mark OUT. In all cases, the selection will be performed on entire elements, not from the mark positions:

To select all elements (entire elements) …	Proceed as follows:
from the nowline up to the end of the edit,	Click or press .
from the beginning of the edit up to the nowline,	Click + or press +
between the mark IN and mark OUT	Click + or press +

8.3. Placing Clips onto the Timeline

8.3.1. Introduction

Various Methods to Add Clips to an Edit

There are many different ways to add clips onto your edit. The main methods for placing a clip to your edit are the following ones:

- Dragging the clip from the Player into a bin when the **Fill** button is active.

  This adds the clip to the end of the timeline.
- Dragging the clip from a bin or nearline to a given position in the edit.
- Dragging the clip from the Player to a given position in the edit.

Possible Positions of a Clip in an Edit

Depending on the Insert/Overwrite mode you have selected, you can drag a clip to the following positions into the timeline:

- at the end of the clip
- on a transition
- on the nowline
- on a mark IN or mark OUT point
- between a mark IN and mark OUT points
- anywhere in the edit

This will be explained in details in the following sections.

8.3.2. Important Prerequisites

Introduction

Before you drag a clip into an edit, you always need to perform the following actions:

1. Select the Insert or Overwrite mode with the **Insert/Overwrite** button in the timeline:

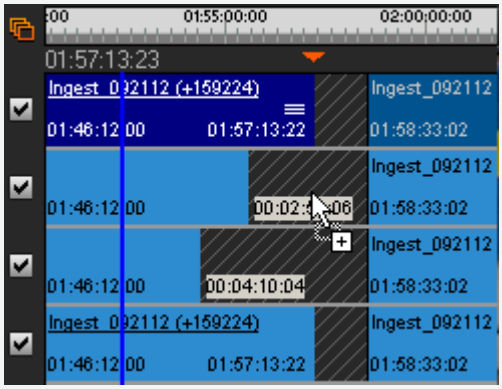
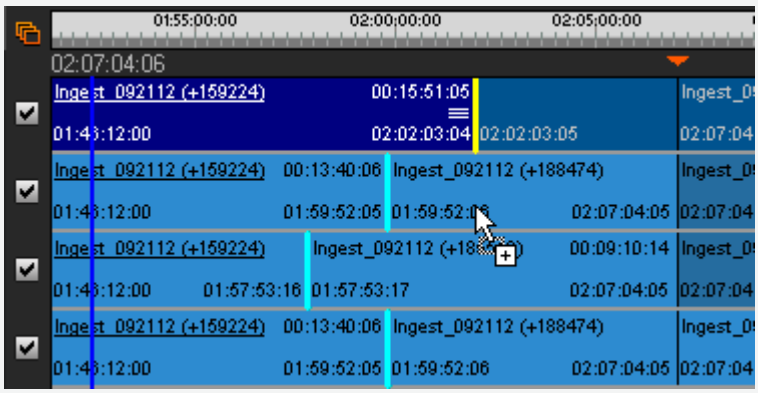
2. Select the clip tracks to be added to the edit.

Insert and Overwrite Modes

Before you drag a clip onto the timeline, you need to define the way you want to insert it. Two modes are available: **Overwrite** or **Insert**.

You select the mode and toggle between both modes by:

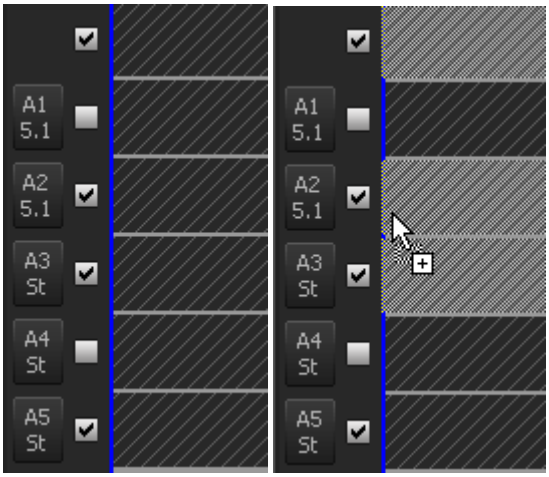
- clicking the **Overwrite/Insert Mode** button
- pressing the V keyboard key.

Mode	Description
Overwrite (default) (white)	Adds the media in the timeline, overwriting the existing media from the selected position. In other words, the media in the timeline will be removed from the insertion point by the duration of the added media.
Insert (colored)	Adds the media in the timeline without overwriting existing media and pushes further right the existing elements of the timeline placed after this position. In this mode, you can only insert the media on the clip boundaries which are common to all selected tracks. The blank areas are not taken into account. The possible insertion point is shown with a red arrow on the top of the timeline:  

Selecting the Tracks to be Added to the Timeline and their Audio Type

The following constraints apply when placing a clip on the timeline:

- It is not allowed to drop a clip over the video area of the timeline. This rule does not apply to a clip containing exclusively a video element.
- Timeline audio tracks must be selected (from the check box).



- Dropping clips into the timeline is only possible between the same types of audio tracks. You will not be able to drop a stereo track on a 5.1 track. Timeline audio track type must have been set according to the clip track audio type: if the clip contains two 5.1 tracks and 2 stereo tracks, they must be set in the timeline.
- The number of clip audio tracks must not exceed the number of available timeline tracks. A clip with 5 stereo tracks will not be droppable if a 5.1 track has been set in the timeline, as only 4 stereo tracks will be available.
- Only 5 audio tracks are available in the timeline. It is therefore not possible to place a clip with more than 5 audio tracks. If the clip contains more than 5 audio tracks:
  - When you drag a clip from the Player onto the Timeline, only the tracks selected in the Player with the track selection buttons will be added to the edit:

  - When you drag a clip from the Elements grid to the timeline, only the active tracks of the clip will be added to the edit.

8.3.3. Tools to Easily Position Clips in the Timeline

Clip Shadow During Drag Action

When you place a clip within the timeline, a shadow corresponding to the clip (from mark IN to mark OUT) is displayed to indicate where the clip will be positioned.

Magnetic Effect

When you place the clip around a mark (whatever the mark), a magnetic effect helps you place the clip precisely at the requested position.

8.3.4. Placing Clips in an Edit Depending on the Requested Position

Preliminary Steps

Before you drag a clip into an edit, you always need to perform the following actions:

1. Select the Insert or Overwrite mode with the Insert/Overwrite button in the timeline:
2. Select the clip tracks to be added to the edit

This section provides more detailed information on these steps.

Note
When you place clips in Insert mode, you can only use the **Fill** button, or place the clip on a transition or at the end of the edit. The other options are not available.

Automatic Clip Insertion at the End of an Edit (Fill)

If the **Fill** button is active (colored display) and the clip is dragged to the Clips zone of the Project area, it will also be placed on the timeline, at the end of any material currently on the timeline.

Placing a Clip at the End of an Edit or on a Transition

To add a clip at the end of the last clip of the timeline or on a transition, drag the clip to the requested position:

- In Overwrite mode, you can use the magnetic effect to place the clip exactly after the last frame or on the transition.
- In Insert mode, a colored down arrow appears above the timeline to indicate where the clip will be placed.

Placing a Clip Using the Nowline, Mark IN or Mark OUT

The following table presents the main options to define the position of a clip when it is added to the timeline using the nowline, the mark IN or the mark OUT position. These actions can only be performed in the Overwrite mode.

To position the IN point of the clip …	Do the following:
• on the IN point of a clip in the edit OR • on the nowline in the edit	Drag and drop the clip straight onto the transition, or the nowline, and release the mouse button.
• on the mark IN in the edit	Drag and drop the clip on the left of the mark IN, and release the mouse button.
• on the mark OUT in the edit	Drag and drop the clip on the right of the mark OUT and release the mouse button.

To position the OUT point of the clip …	Do the following:
• on the nowline in the edit	Drag and drop the clip straight onto the nowline pressing the **CTRL** key. Then release the mouse button.
• on the mark IN in the edit	While you press the **CTRL** key, drag and drop the clip on the left of the mark IN, and release the mouse button.
• on the mark OUT in the edit	While you press the **CTRL** key, drag and drop the clip on the right of the mark OUT and release the mouse button.

Placing a Clip Anywhere in the Timeline

To place the clip anywhere in the timeline, drag the clip to the requested position in the timeline, and release the mouse button.

During the drag action, a shadow corresponding to the clip is displayed to indicate the clip position in the timeline. Moreover, the timecode field on the upper left of the timeline displays the mouse cursor.

Placing a Clip Between Mark IN and Mark OUT (Fit to Fill)

A clip (or a portion of a clip between a mark IN and park OUT defined in the player) can be dragged to the timeline between a defined mark IN and mark OUT points. This feature is also called **Fit to Fill** or **four-point edit**.

In case the length of the clip differs from the length between the mark IN and mark OUT points on the timeline, the clip can be inserted in several ways:

- Drag and drop the clip between the mark IN and mark OUT points on the timeline:

  The IN point of the clip matches the mark IN on the timeline and the clip length is modified.

- Drag and drop the clip between the mark IN and mark OUT points on the timeline with the **CTRL** key pressed:

  The OUT point of the clip matches the mark OUT on the timeline and the clip length is modified (from its IN point).

- Drag and drop the clip between the mark IN and mark OUT points on the timeline with the **ALT** key pressed:

  The clip is placed between the marks on the timeline. The clip length equals the length set in the player but the speed is calculated automatically and depends on the duration between the timeline marks.

8.3.5. Add a Clip To Fill in a Blank Area in the Timeline

Introduction

The **Blank Fill**mode is used to place clips on the timeline to fill in areas of the timeline where there is no media present. Even when the clip is longer than the blank to be filled, this mode ensures the next clip is not overwritten. This mode will only work in combination with the Overwrite mode.

To activate the **Blank Fill** mode, click the button. The button will turn colored.

Methods

Depending on the expected result, you can proceed in three different ways:

- Drag the clip to be added to the beginning of the blank area:

  The IN point of the clip is matched to the beginning of the blank area.

- Drag the clip anywhere in the blank area

  The IN point of the clip to be added will be dropped where you have released the mouse.

- Drag the clip in the blank area, while pressing the **CTRL** key:

  The OUT point of the clip to be added will be matched to the end of the blank area

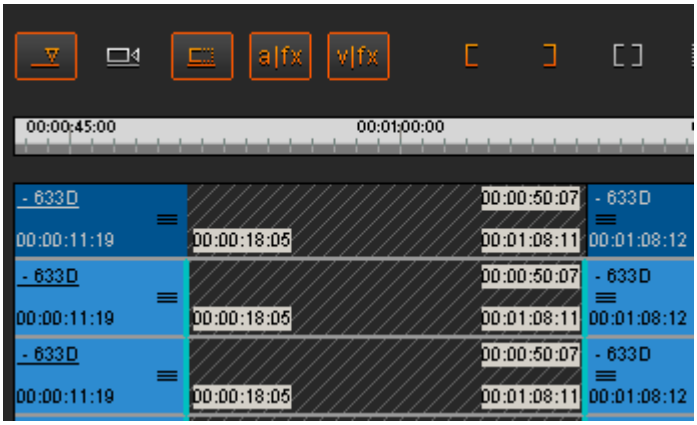
- Drag the clip in the blank area, while pressing the **ALT** key:

If the clip is…	Then…
greater than the hole in the timeline	The clip speed will be decreased to match the blank area.
smaller than the hole in the timeline	The clip speed will be increased to match the blank area. The following criteria must be met: • the parameter “Can Accelerate” must have been enabled in Xedio Manager > Softwares > Parameter Profiles > CleanEdit. • the maximal speed, set with the “Max Fast Motion Speed” parameter, must not be exceeded.

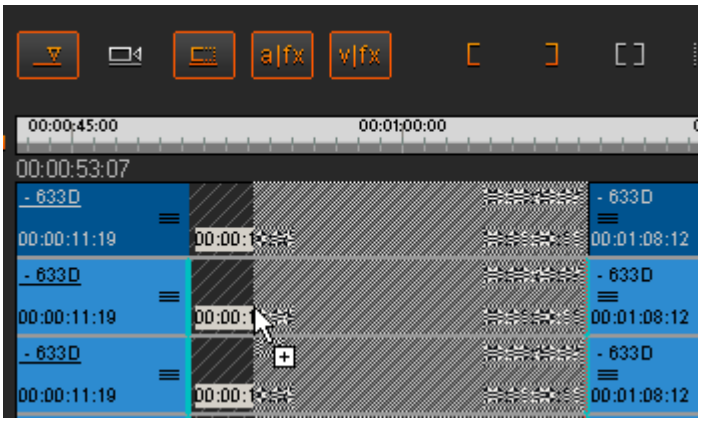
Example

The following screenshots show the situation before, during and after the drag-and-drop operation using the blank fill option. In this case, the clip is dropped at the beginning of the blank area.

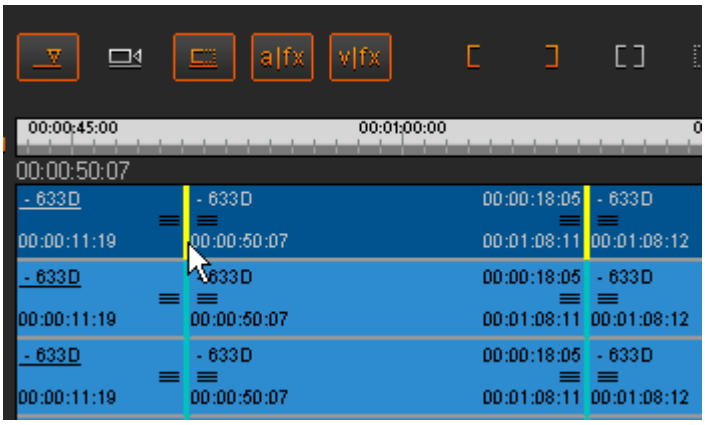
Before



During



After



8.4. Moving Clips or Elements on the Timeline

8.4.1. Moving a Clip or Element in the Timeline

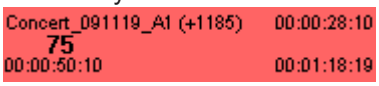
How to Move an Element

To move an element freely on the timeline, proceed as follows:

1. Select it as described in section "Selecting a Clip" on page 119.
2. Do one of the following actions:
   - Drag it to its new position.

     The magnetic effect, that "sticks" the elements when near the nowline, mark IN, mark OUT and the clip edges on the elements already present on the timeline, can ease the movements of the edit elements.
   - Use the usual Cut and Paste shortcuts to paste it to a new location in the timeline.

Warning
If an element selected has other elements associated with it (for example the video element from a clip with the associated audio elements), moving only one of the elements will desynchronize the other elements. This will show on the timeline by the associated audio turning red:



See section "Resynchronizing Associated Clip Elements" on page 134 to resynchronize elements.

How to Move Several Elements

To move several elements at once, would they be synchronized or not, proceed as follows:

1. Select them as described in section "Selecting a Clip" on page 119.

Note
SHIFT + click an element is an easy way to select a whole group of synchronized elements (this can include video, audio and tags) and move them at once.

2. Do one of the following actions:
   - Drag the selected group to its new position.
   - Use the usual Cut and Paste shortcuts to paste it to a new location in the timeline.

8.4.2. Moving an Audio Clip between Tracks without Modifying its Horizontal Position

You can move an audio element between tracks without modifying its position compared to the other elements of the clip. This will prevent from audio desynchronization.

To move an audio element between tracks, without modifying its horizontal position, proceed as follows:

1. Select the clip by clicking once with the left button of the mouse.
2. Keep the **SHIFT** key pressed.
3. Drag the clip to the audio track desired.

8.5. Replacing Clips by Linked Clips

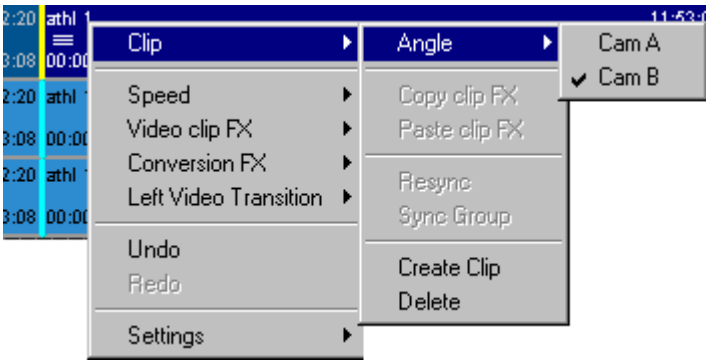
Introduction

Linked clips can have been created from ganged recorder channels in IPDirector and then sent to Xedio Suite or stored on a shared nearline.

When such a clip is used in an edit, it can easily be replaced by one of its linked clips. You can therefore use a sequence recorded through a different camera angle.

How to Replace a Clip by a Linked Clip

1. Select the clip you want to replace.
2. Right-click on it to access the contextual menu:



3. Select **Clip > Angle** and then one of the ganged cameras.

   The clip is replaced by its linked clip.

NEW ! With Multicam 14, depending on the server configuration, up to 12 channels can be used, which corresponds to letter A to L.

8.6. Deleting Clips or Elements From the Timeline

8.6.1. Deletion Methods

There are several ways to delete media from the edit on the timeline:

- Deleting selected (entire) elements of an edit.

  See section "Deleting Timeline Elements" on page 132.

- Deleting portions of an edit selected using the mark IN and mark OUT points.

  See sections "Deletion Modes" on page 131 and "Deleting Portions of an Edit" on page 131.

8.6.2. Deletion Modes

To select the Deletion mode and toggle between modes, you can click the button or press . The following table briefly explains the two delete modes:

Button	Keyboard Shortcut	Description
		When you delete a portion of the timeline with the **Delete & Clear** option active (white button), the area from which the element is deleted will remain empty after the deletion.
		When you delete a portion of the timeline with the **Delete & Shift** option active (colored button), any element located on the right of the deleted portion will be shifted to the left, so as to replace the deleted elements. Only the clips on selected tracks will be shifted.

Note
This mode doesn't take into account the synchronization between the different tracks and so can easily cause a desynchronization of associated clip elements.

8.6.3. Deleting Portions of an Edit

Procedure

To delete a portion of an edit on the timeline, proceed as follows:

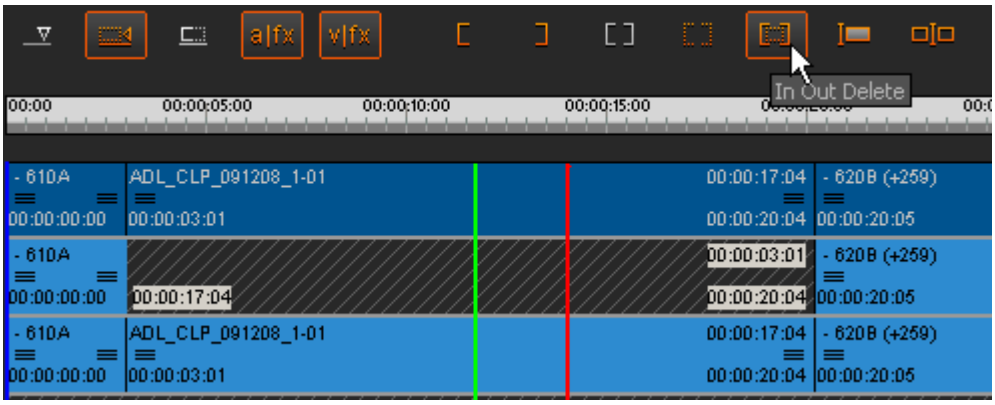
1. Select the deletion mode you want to apply, using the button.
2. Place a mark IN and mark OUT to define the portion of the edit to be removed.
3. Do one of the following:
   - Click .
   - Press .

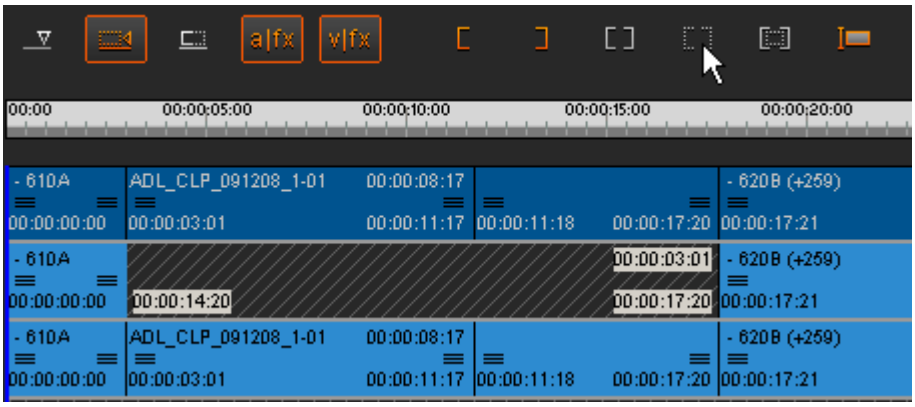
The portion of the timeline between the mark IN and mark OUT is removed.

The remaining timeline elements on the right of the deleted area are shifted left or not, depending on the deletion mode selected.

Example

In the example below, the portion of the clip ADL_CLP_091208_1-01 between the mark IN and mark OUT is deleted as you click the **IN OUT Delete** button. The option **Delete & Shift** is active during the deletion, which means that the material on the right of the mark OUT is shifted to the left after the Delete action.





8.6.4. Deleting Timeline Elements

Procedure

There are various ways of deleting entire element(s) or a whole clip from the timeline.

To delete one or more elements in an edit, proceed as follows:

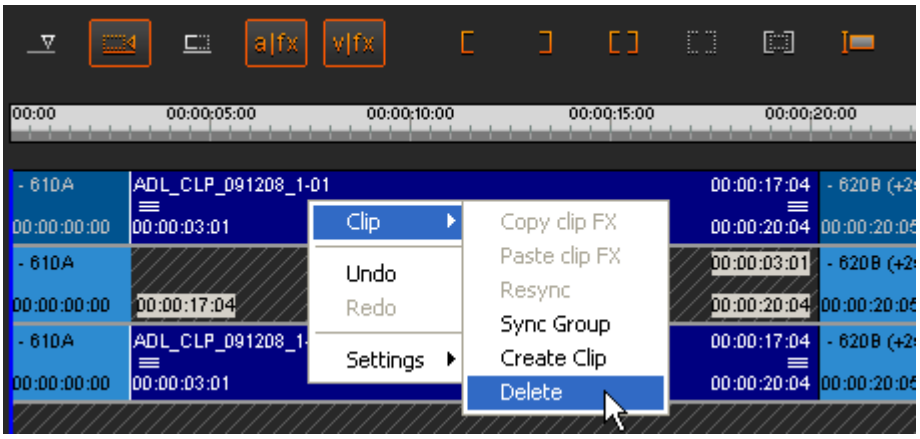
1. Select the deletion mode you want to apply, using the button.
2. Select the elements to be deleted, using **CTRL** or **SHIFT** + click if you want to select several elements.
3. Do one of the following:
   - Press on the keyboard.
   - Right-click in the edit and select **Clip > Delete** from the contextual menu.

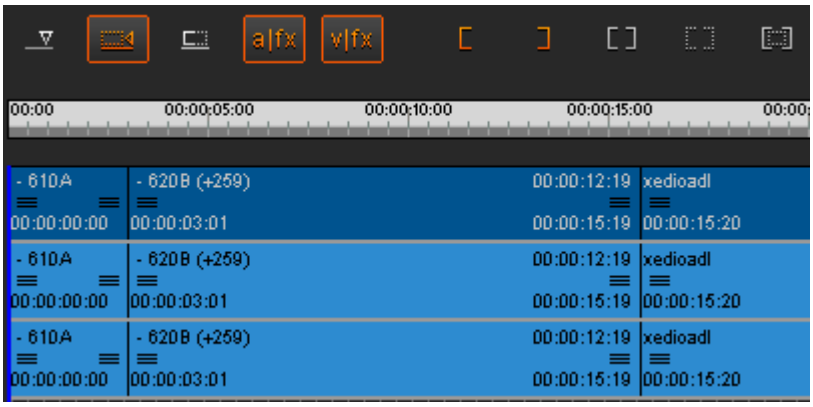
The selected elements are removed from the edit.

The remaining timeline elements on the right of the deleted elements are shifted left if the **Delete and Shift** mode is active and if a blank area is left on all the tracks after the deletion.

Example

In the example below, both video and audio elements of a clip are deleted using the **Delete** command in the contextual menu. The **Delete & Shift** option is active, which means that the material on the right of the mark OUT is shifted to the left after the delete action.



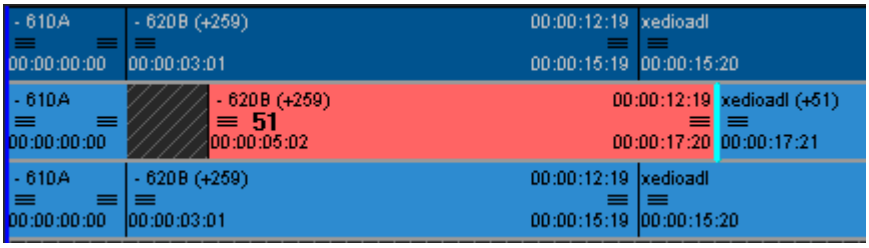


8.7. Tidying Up and Organizing the Edit

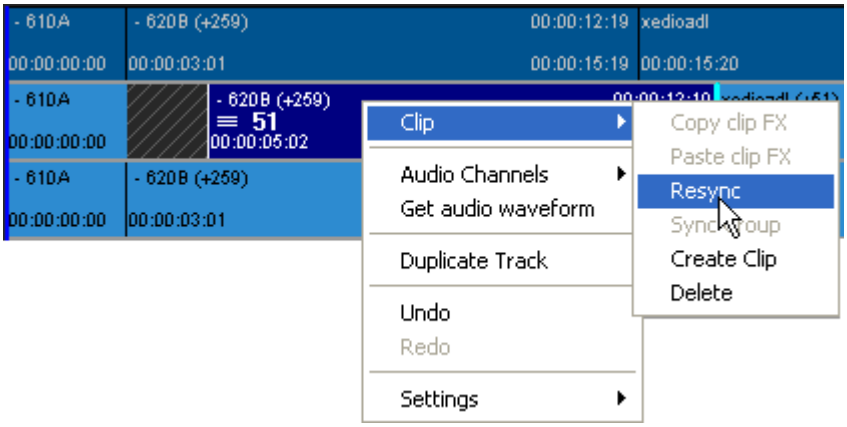
8.7.1. Resynchronizing Associated Clip Elements

When an audio element becomes desynchronized from its associated video, it will turn red (by default) and display the offset value:

Desynchronized Element:



To resynchronize the element, right-click the element and select **Clip > Resync** from the contextual menu:



8.7.2. Removing Blank Areas on a Timeline

Procedure

When the edit contains common empty areas on all the video and audio tracks, you can remove these using the **Blank Clear** button . This option keeps the synchronization between the different tracks.

To remove common blank areas on a timeline, proceed as follows:

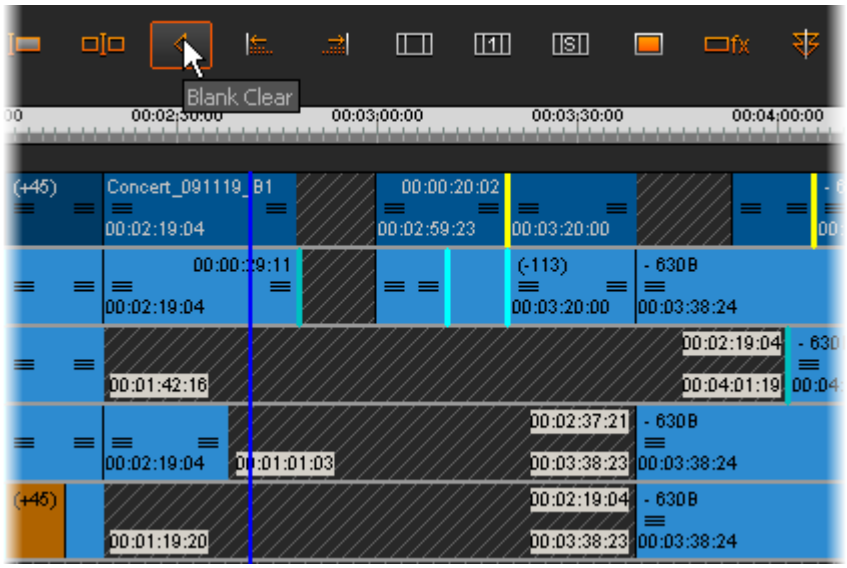
1. Ensure that all the tracks are selected in the timeline with the Track Selection check box in front of each track.
2. Position the nowline on the left of the blank area to be removed.
3. Click the **Blank Clear** button or press .

The common empty zones are deleted.

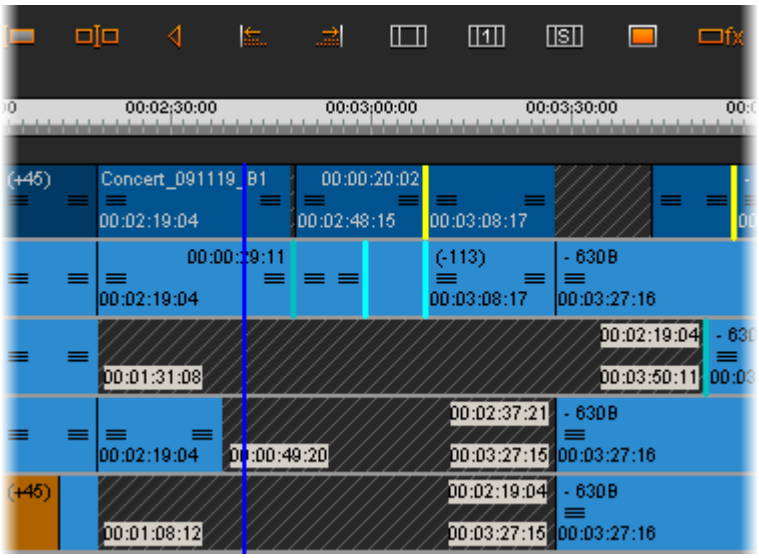
Example

In the example below, the **Blank Clear** button is used to remove the blanks common to all tracks:

Before



After



8.7.3. Aligning Elements on a Reference Element

You can align left or right one or more elements on a reference element with the or :

- A left alignment means you will align the IN point of the elements on the IN point of the reference element.
- A right alignment means you will align the OUT point of the elements on the OUT point of the reference element.

The elements which are aligned will overwrite existing material on the timeline.

To right or left align elements on a reference element, proceed as follows:

1. Using **CTRL** + click, select:
   a. first the elements to align,
   b. last the reference element (on which the other elements should be aligned).
2. Do one of the following:
   - To align left, click the button.
   - To align right, click the button.

8.7.4. Splitting an Element in the Timeline

A timeline element can be split in two elements.

To do so, proceed as follows:

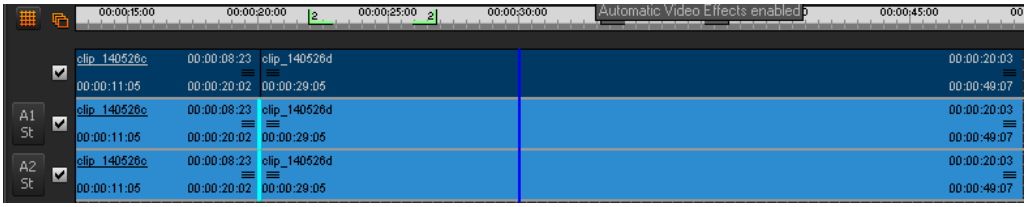
1. Place the nowline where you want to split the element.
2. Select the tracks from which you the elements to be split.

3. Click the **Split** button or press P.

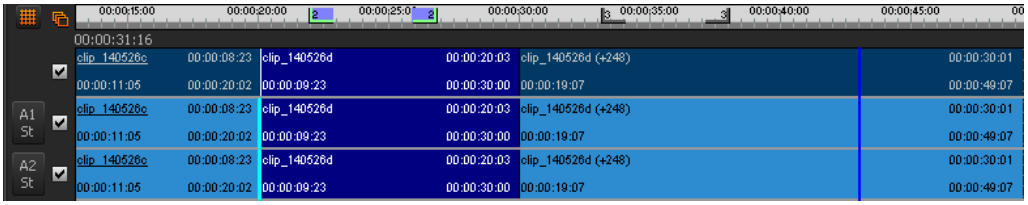
The video and audio elements from the selected tracks are split at the current position of the nowline.

If two tags are grouped with timeline A/V elements in a Sync group and you split the elements between the two tags, the left tag will be linked to the left element and the right tag will be linked to the right element.

Before Split:



After Split:



8.7.5. Grouping Elements in a Sync Group

Introduction

If a clip has elements including both video and audio when placed on the timeline, synchronization between the elements is maintained and any desynchronization is shown by displaying the audio in red.

However, sometimes it is necessary to synchronize elements on the timeline that have no previous association, for example to add real time synchronized audio to a slow motion replay or keep a synchronized relationship between a music track and certain video elements.

It is possible to synchronize an associated logo, or graphic, with the adjacent video and audio. In the same way, subtitles can be synchronized with the video and audio they relate to.

Procedure

To define a synchronized group of elements, proceed as follows:

1. Select the group of elements to be synchronized. The elements can be video, audio and tags. The selection order does not matter. See section "Selecting a Clip" on page 119.
2. Right click on the mouse and select **Clip > Sync Group** from the contextual menu.

When the group of synchronized elements is defined, the audio elements which would be moved compared to the synchronized video element will be displayed as desynchronized elements (red).

Tip
To see the group of synchronized elements, press **SHIFT** and click one of the elements (video element, one of the audio elements or a tag). All the synchronized elements, including tags if any, appear as selected:

Tip
If the Auto Sync Tags button is active above the timeline, any new tag added to the timeline is automatically synchronized with the video below.

To remove an element from a sync group, redefine the sync group without this element.

8.8. Cue Points

8.8.1. Introduction

The cue points are reference marks that can be placed in the timecode bar wherever needed in the edit. Their primary goal is to mark the edit with a visual flag and, optionally, a description of the event, and therefore to ease the access to a precise position on that edit.

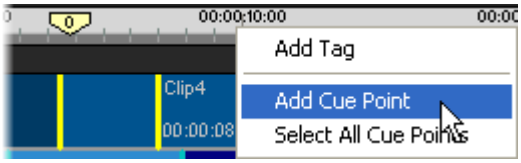
They are represented by a yellow triangle with their number written in them. Each logged event contains a timecode, a label and a description.

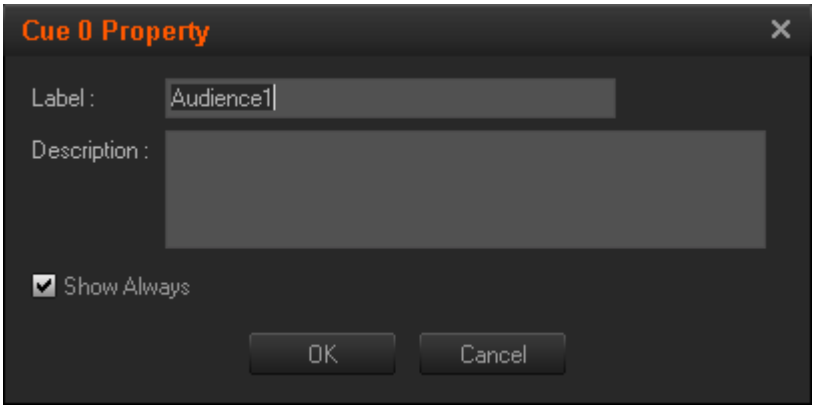
8.8.2. How To Add Cue Points

To create a cue point, proceed in one of the following ways:

- Position the nowline where you want to place the cue point, press

, followed by a number on the keypad, and then press **ENTER**.
- Right-click on the timecode bar, and select **Add Cue Point** from the contextual menu.





To create a cue point rapidly when an edit is being played,

- Press

+

8.8.3. How To Go to and Select Cue Points

To go to a defined cue point:

- Press the cue point number on the keypad, and press **ENTER**.

To select a specific cue point:

- Click the cue point on the Media bar.

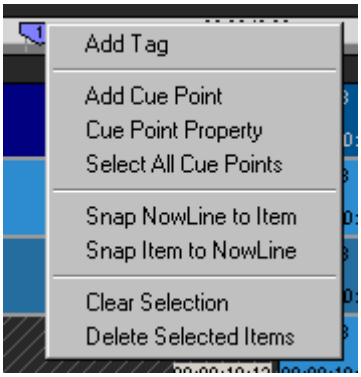
  The cue point will turn purple when selected.

8.8.4. Contextual Menu for Cue Points

The contextual menu of the timecode bar gives in addition some options for the tags and cue points, when they are selected.

To move the nowline to the cue point on which you have right-clicked, select the **Snap Nowline to Item** command. You can also press the number corresponding to the cue point on the keypad and validate with **ENTER**.

To move the cue point on which you have right-clicked to the nowline position, select the **Snap Item to Nowline** command.



8.9. Extending or Shortening Clips

8.9.1. Introduction

It is possible to extend or to shorten the duration of a clip previously added to the edit, by modifying the IN or OUT point. The material from the original media will be used to extend the clip, if available. The Overwrite or Insert modes are taken into account in extend actions.

This can be done in different ways:

- using one of the **Extend** editing buttons on the timeline:
- dragging the media on the timeline itself.

8.9.2. Extend Modes

Different extend modes are available to achieve slightly different results:

Function	Function Name and Description
Extend	The **Extend** button allows extending or shortening a clip on the selected track(s), modifying its IN or OUT point to a position defined by a mark IN or mark OUT on the timeline. See section "Extending or Shortening a Clip" on page 141.
Extend Still	The **Extend Still** button allows: • extending the IN point of a selected video element as a still frame (0% motion) up to a mark IN defined before the IN point. • extending the OUT point of a selected video element as a still frame up to a mark OUT defined after the OUT point. See section "Extending a Clip with a Still Frame" on page 144.
Extend Speed	The **Extend Speed** button allows: • extending the IN point of a clip up to a mark IN defined, without modifying its content. • extending the OUT point of a clip up to a mark OUT defined, without modifying its content. The effect achieved is a slow motion or fast motion clip. See section "Extending or Shortening a Clip by Modifying its Speed" on page 145.

8.9.3. Extending or Shortening a Clip

Definition and Variations

The **Extend**function shortens or extends the duration of an element or a clip to a mark IN or mark OUT defined, using the content of the original media if available.

If the original media does not include additional material, this will not be possible to extend the selected elements or clip.

You can perform one of the following actions:

- Extend the IN point of a clip
- Extend the OUT point of a clip
- Shorten the IN point of a clip
- Shorten the OUT point of a clip

How to Extend or Shorten a Clip Using the Extend Button

Procedure

To extend or shorten selected elements or clip, proceed as follows:

1. If required, change the Overwrite or Insert mode clicking the button.
2. Depending on whether you want to extend or shorten the selected elements or clip on its IN or OUT point, do one of the following:
   a. To extend the IN point, place a mark IN before the IN point to be extended.
   b. To extend the OUT point, place a mark OUT after the OUT point to be extended.
   c. To shorten the IN point, place a mark IN after the IN point to be shortened.
   d. To shorten the OUT point, place a mark OUT before the OUT point to be shortened
3. Select the elements or clip to be extended or shortened.
4. Click the **Extend** button .

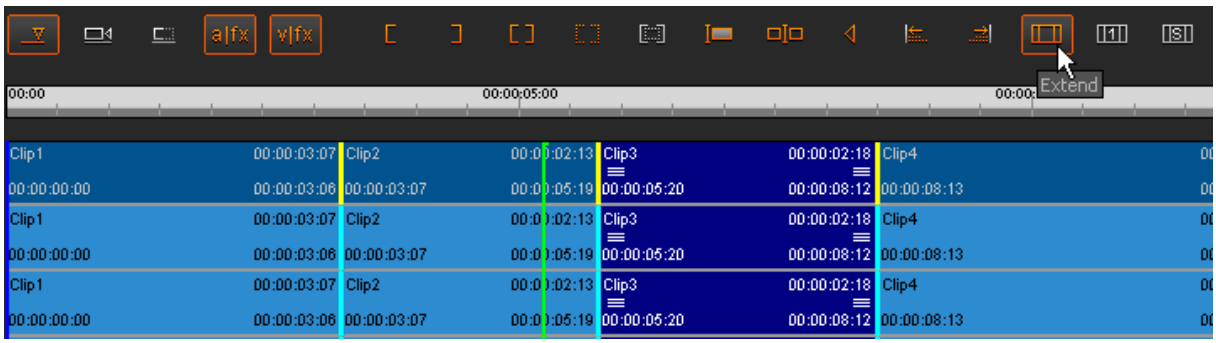
The IN or OUT point of the elements or clip that had to be extended or shortened has been moved and the possible additional material has been retrieved from the original media.

Note
If there are both, an IN and an OUT point on the edit, a popup window will ask the operator to choose to which mark he wants to extend the element selected.

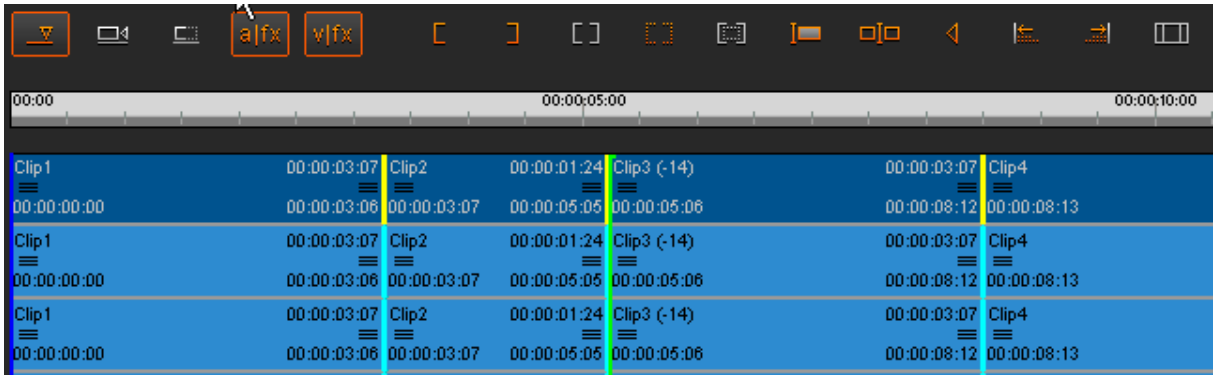
Example

In the example below, you work in Overwrite mode and want to extend the IN point of the clip called "Clip3".

To do this, you select the clip to be extended and place a mark IN where you want the IN point of the clip to be extended to.



The screenshot below shows the extended clip:



How to Extend or Shorten a Clip Using a Drag Operation

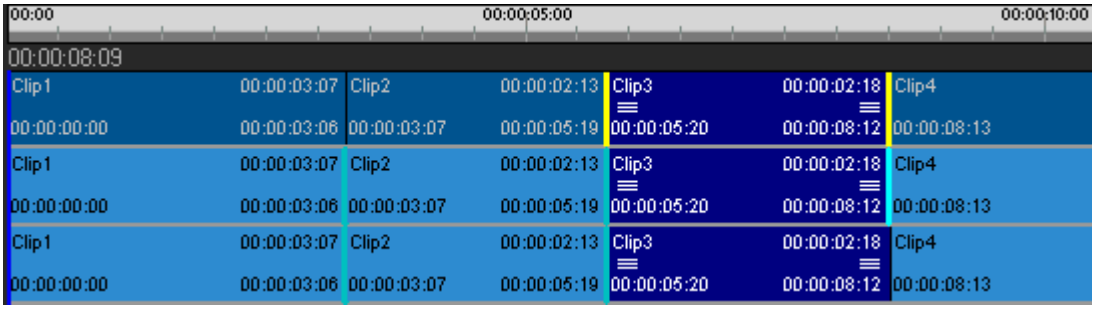
Procedure

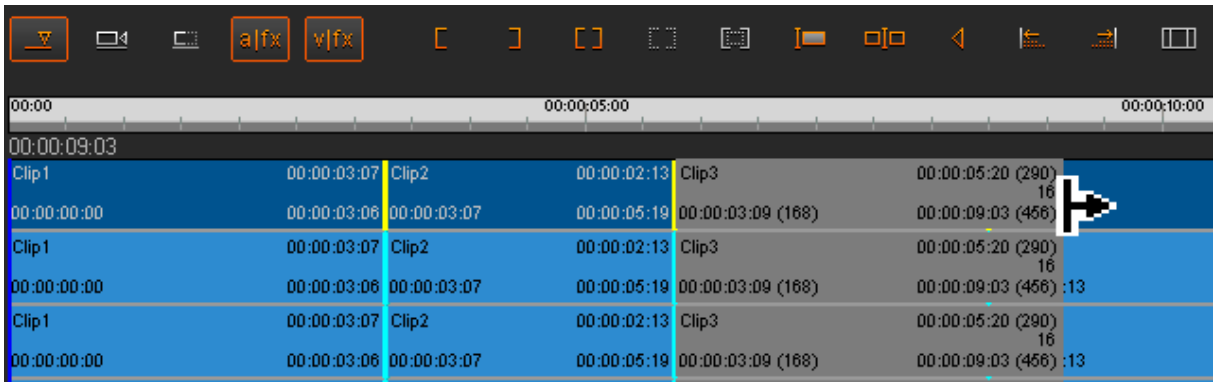
To extend or shorten selected elements or a clip on the IN or OUT point using a drag operation, proceed as follows:

1. If required, change the Overwrite or Insert mode clicking the button.
2. Select the elements or clip to be extended or shortened.
3. Position the mouse cursor over the 3 lines symbol near the IN or OUT point of the clip and drag the clip edge to the required position on the timeline.
4. Release the mouse.

Example

In the example below, you work in Overwrite mode and want to extend the OUT point of the clip called "Clip3".





8.9.4. Extending a Clip with a Still Frame

The **Extend Still** function repeats only the first/last frame of a clip up to the modified IN or OUT point.

To extend a clip with a still frame, proceed as follows:

1. If required, change the Overwrite or Insert mode clicking the button.
2. Select the video element to be extended with a still frame.
3. Do one of the following:
   - To extend the IN point, place a mark IN before the IN point of the selected element.
   - To extend the OUT point, place a mark OUT after the OUT point of the selected element.
4. Click the **Extend Still** button .

The clip is extended and the extended area is filled in with the first frame of the clip (when the IN point has been extended) or with the last frame of the clip (when the OUT point has been extended).

Note
Increasing the length of a video element by dragging the element edge and pressing **SHIFT** simultaneously will extend the element with a still frame. This is done in the same way as the normal Extend operation explained in section "How to Extend or Shorten a Clip Using a Drag Operation" on page 143.

8.9.5. Extending or Shortening a Clip by Modifying its Speed

The **Extend Speed** function keeps the original length of the clip but modifies the play speed to fit in the modified IN or OUT point. In this case a rendering is needed.

To extend or shorten a clip by modifying its speed, proceed as follows:

1. If required, change the Overwrite or Insert mode clicking the button.
2. Select the video element to be extended or shortened by modifying the play speed.
3. Do one of the following:
   - To extend the IN point, place a mark IN before the IN point to be extended.
   - To extend the OUT point, place a mark OUT after the OUT point to be extended.
   - To shorten the IN point, place a mark IN after the IN point to be shortened.
   - To shorten the OUT point, place a mark OUT before the OUT point to be shortened
4. Click the **Extend Speed** button .

The clip is extended or shortened without adding or removing video material but its play speed is adapted to fit between the modified IN or OUT point.

Note
Increasing or reducing the length of a video element by dragging the element edge and pressing **ALT** simultaneously will create a fast or slow motion clip. This is done in the same way as the normal Extend operation explained in section "How to Extend or Shorten a Clip Using a Drag Operation" on page 143.

8.10. Creating Fast Motion Clips

8.10.1. Various Ways to Create Fast Motion Clips

Fast motion clips can be created using one of the following methods:

- Defining the speed from the clip contextual menu, with the **Speed** command.

  See section "Modifying the Playback Speed of a Clip Using the Speed Command" on page 146.

- Using the **Extend Speed** button .

  See section "Extending or Shortening a Clip by Modifying its Speed" on page 145.

- Dragging the transitions while pressing the **ALT** key.

  See section "Extending or Shortening a Clip by Modifying its Speed" on page 145.

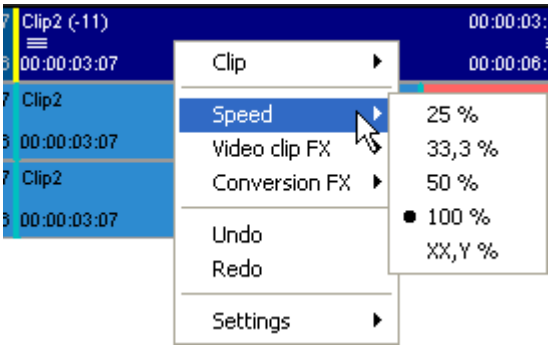
- Using the **Fit to Fill** feature (also called 4-point edit).

  See section "Placing a Clip Between Mark IN and Mark OUT (Fit to Fill)" on page 126.

8.10.2. Modifying the Playback Speed of a Clip Using the Speed Command

Procedure

To change the speed of a clip, select the video element of the clip to change, right-click it, and select **Speed** from the contextual menu. You can do one of the following:



- Select a preset speed (for slow motion clips) in the available list
- Click the **XX.Y%** option and enters the required playback speed in the dialog box that opens.

Result

Once the speed has been changed, the length of the video element is adapted accordingly and will show a square pattern to indicate the clip speed has been adjusted.

The modified speed is displayed next to the element name:

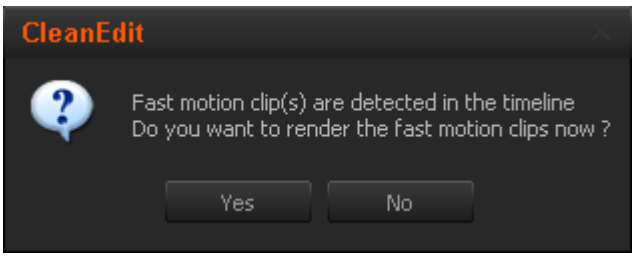
In Overwrite mode, this may remove material after the clip.

When the clip speed exceeds 100%, you need to render the clip, using the button. See section "Rendering Fast Motion Clips" on page 147 for more information on fast motion clips.

8.10.3. Rendering Fast Motion Clips

You should render fast motion clips: The **Rendering** button is enabled above the timeline as soon as a fast motion clip is detected in the timeline.

When you check an edit with fast motion clips that have not yet been rendered, the following message will be displayed:



Selecting **Yes** will render the fast motion clips immediately, selecting **No** will leave them as such (not rendered). The transcoding codec used for the rendering of a fast motion clip is set in Xedio Manager.

The name of the rendered file follows the pattern below:

`FM_IdMediaOrigin_tcInMedia_tcOutMedia_speed_GUID_[lr/ hr].[ext]`

where:

`IdMediaOrigin`	= ID of the original media
`tcInMedia`	= TC IN (in HHMMSSFF)
`tcOutMedia`	= TC OUT (in HHMMSSFF)
`speed`	= Speed (in %)
`GUID`	= Unique identifier (GUID)
`lr/hr`	= Resolution: either lr (lo-res) or hr (hi-res)
`.ext`	= File format depending on the codec type

Note
Before launching a Fast Motion Rendering process, when working with the low resolution, you need to make sure the high-resolution media files are also available on the main storage.
If the high-resolution file is missing, a popup window appears to inform you the high-resolution file is not available. You need to restore this file from the Archive before launching the rendering.

8.11. Trimming Edit Points on the Timeline

8.11.1. Definition and Access to Trim Area

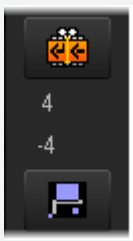
The Trim functions (also called Roller functions) consist of adjusting the IN or OUT point of a timeline element or clip. This function is used to fine-tune transitions between two elements after you have performed the first rough cuts.

The Trim function will shorten or lengthen the element that is in trim mode. The length of the following or previous element will be impacted in Overwrite mode.

To display the Trim area, click the button located between the Player and Recorder areas. If a trim is not allowed at an edit point, the buttons will not be active.

8.11.2. Overview on the Trim Functions

The following table shows an overview on the various buttons available in the Trim area. See section "Activating the Trim Functions" on page 150 to know how to activate the functions.

Button	Description
	The **Trim OUT** button allows the user to modify the OUT point of the clip before the transition.
	The **Trim IN** button allows the user to modify the IN point of the clip after the transition.
	This **Roll Transition** button allows the user to modify both the OUT point of the clip before the transition AND the IN point of the clip after the transition.
	During a trim operation, the two central counters provide precise information on the number of frames that will be trimmed. The meaning of the figures differs whether you are performing: • a Trim OUT, Trim IN, Roll Transition on one hand • a Roll Clip on the other hand

Button	Description
	The **Save** button confirms and applies the trim operation to the edit.
	The **Cancel** button cancels the trim operation.
	The **Roll Clip** button allows the user to modify the IN and the OUT points of the selected clip, leaving its length unchanged.
	The **Match Frame** button allows the user to retrieve the original media that contains the image displayed in the Recorder and load this same image in the Player.
	The **RET** button is not available with the IPD Xedio plugin.

8.11.3. Trimming or Rolling Around the Clip Transition

Introduction

The three upper buttons make it possible to trim around a clip transition. The following table describes what the buttons are used for.

Button	Description
	The **Trim OUT** button allows the user to modify the OUT point of the clip before the transition: • by adding a frame to it when you click the button. • by removing a frame to it when you press **SHIFT** and click the button simultaneously.
	The **Trim IN** button allows the user to modify the IN point of the clip after the transition: • by adding a frame to it when you click the button. • by removing a frame to it when you press **SHIFT** and click the button simultaneously.
	This **Roll Transition** button allows the user to modify both the OUT point of the clip before the transition AND the IN point of the clip after the transition. This function "rolls" the transition: • on the right when you click the button. • on the left when you press **SHIFT** and click the button simultaneously.

Activating the Trim Functions

These buttons are only available when the nowline is located on a transition common to all selected tracks. For each track unused on the transition, the corresponding **Track Selection** check box must be cleared.

When you first use one of the Trim functions, it changes the configuration of the Player and the Recorder preview windows:

- The Player displays the last frame of the clip before the transition.
- The Recorder displays the first frame of the clip after the transition.

How to Trim Around the Clip Transition

To trim around the clip transition, proceed as follows:

1. Place the nowline on the transition you want to trim.

   The **Trim** buttons become active.

2. Click the **Trim** button corresponding to the requested trim action.

   The last frame of the clip before the transition is loaded onto the Player.

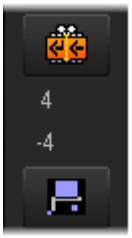
   The first frame of the clip after the transition is loaded onto the Recorder.

   The counters are initialized to 0.

3. Click the requested **Trim** button as many times as the number of frames you want to trim the transition.

   The upper counter specifies the number of frames that will be added to (move to right) or removed from (move to left) the end of the clip before the transition.

   The lower counter specifies the number of frames that will be added to (move to left) or removed from (move to right) the beginning of the clip after the transition.

4. Once the trim action has been defined, you can

   - confirm the trim action by clicking
   - reinitialize the trim operation by clicking

When you confirm the trim action, it is applied to the relevant clip, the counter information disappears.

8.11.4. Rolling a Clip

Introduction

The button makes it possible to roll a clip, which means to modify the IN and the OUT points of the selected clip, leaving its length unchanged.

This function "rolls" the clip:

- on the left when you click the button:

  This adds frames at the beginning of the clip and removes the same number of frames at the end.

- on the right when you press **SHIFT** and click the button simultaneously:

  This removes frames at the beginning of the clip and adds the same number of frames at the end.

Activating the Roll Clip Function

The **Roll Clip** button is only available when the nowline is located on a transition common to all selected tracks, and when the clip to be rolled is selected.

When you first use the **Roll Clip** button, it changes the configuration of the Player and the Recorder preview windows:

- The Player displays the first frame of the clip to be rolled.
- The Recorder displays the last frame of the clip to be rolled.

How to Roll a clip

1. Place the nowline before the clip you want to roll and select the clip.

   The **Roll Clip** button becomes active.

2. Click the **Roll Clip** button:

   The first frame of the clip is loaded onto the Player.

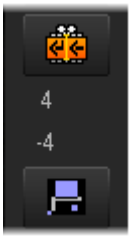
   The last frame of the clip is loaded onto the Recorder.

   The counters are initialized to 0.

3. Click the **Roll Clip** button as many times as the number of frames you want to roll the clip.

   The upper counter specifies the number of frames the IN point of the clip will be shifted to the left (negative value) or to the right (positive value).

   The lower counter specifies the number of frames the OUT point of the clip will be shifted to the left (positive value) or to the right (negative value).



4. Once the roll action has been defined, you can
   - confirm the action by clicking
   - reinitialize the operation by clicking

When you confirm the action, it is applied to the clip, the counter information disappears.

Note
Please refer to the keyboard shortcuts reference chart appended to this user manual for detailed assignments.

8.11.5. Retrieving the Source of an Edited Image

The images of the edit are previewed in the Recorder area. You can use the **Match Frame** button accessible in the Trim area to display the source of one of those images in the Player, and to have the entire corresponding original media available.

To retrieve the source of an edited image, proceed as follows:

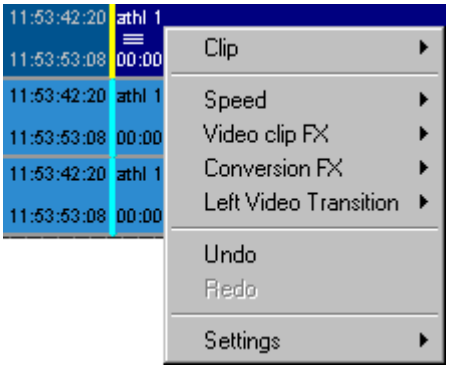
1. Display the desired image in the Recorder area.
2. Click the **Match Frame** button in the Trim area or press the **Backspace** keyboard key.

9. Advanced Video Editing

9.1. Introduction

The advanced video editing chapter will cover the effects which can be added to video clips, either on transitions, or on the clip elements themselves.

All these effects can be defined via the clip contextual menu. The contextual menu is available when you select a video element, and right-click on it.



9.2. Video Transition Effects

9.2.1. Ways to Add Video Transition Effects

Automatic Video Transition Effects

Once you click the v|fx button to activate the **VFX** function, a default video transition is added to each new clip placed into the edit. By default, the default video transition is a mix.

You can modify the default video transition effect, as described in section "How to Modify the Default Video Transition Effect" on page 154.

Manual Video Transition Effects

You can add transition effects "manually", either to a specific transition or to all transitions located between a defined mark IN and mark OUT.

The following video transition effects are available: Cut, Mix, Wipe, Border Wipe, Dip to Color, RTD Effect.

To be able to define transition effects, you will right-click the video elements as follows:

When you right-click…	The transition effect will be applied to…
near the IN or OUT point of a clip	the transition nearest to the mouse cursor.
between a defined mark IN and mark OUT	all the transitions between the marks.

This will give you access to the contextual menu and to the (**Left/Right) Video Transition** commands.

You can also remove the previously defined transition effects clicking the **Clear All** sub-command in the contextual menu.

See section "How to Apply Video Transition Effects Manually" on page 155 for more information on how to define the transition effects.

See section "Possible Video Transition Effects" on page 156 for more information on the various types of transition effects.

9.2.2. How to Modify the Default Video Transition Effect

The default transition is defined in Xedio Manager: Software > Parameter Profiles > (Xedio)CleanEdit > Timeline tab: DefaultVideoTransFx.

However, you can modify the default video transition effect as follows:

1. Right-click the icon and select **Properties.**

   The Video Transition Effect window is displayed.

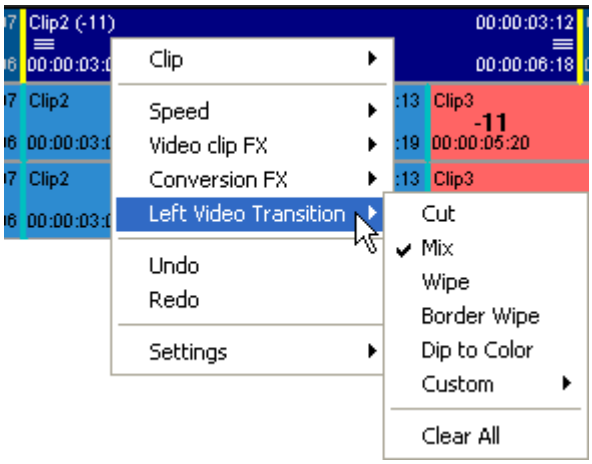
2. Specify the requested default transition effect
3. Click **OK**.

The new transition effect is now the default transition associated with your user profile.

9.2.3. How to Apply Video Transition Effects Manually

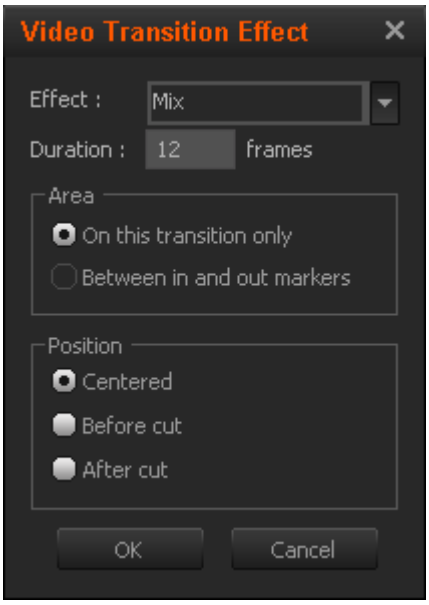
To apply video transition effects to one or several transitions, proceed as follows:

1. Select the transitions where to apply the effects in one of the following ways:
   - To define an effect on a single transition, position the mouse cursor next to the video transition on which you want to add the effect.
   - To define an effect on several transitions, add a mark IN and mark OUT beyond the relevant transitions.
2. Do one of the following:
   - Right-click to access the contextual menu and select the requested effect type in the **(Left / Right) Video Transition** command.



   - Press .

The **Video Transition Effects** window opens. In this window, you can still select another effect. The fields will be adapted according to the selected effect. The definition of the transitions where the effect will be applied, in the Area group box, cannot be modified.



3. In the **Video Transition Effects** window, fill in the transition parameters to specify the duration, position and specific configuration of the transition effect.
4. Click **OK**.

A yellow vertical line is added on the transition where the effect has been added:

9.2.4. Possible Video Transition Effects

Introduction

The various video transition effects can be selected from the contextual menu. For all effects, a specific **VideoTransition Effect** window will be displayed to specify the various parameters, such as duration, position, and possibly other configuration parameters.

None

This option resets the transition into a cut.

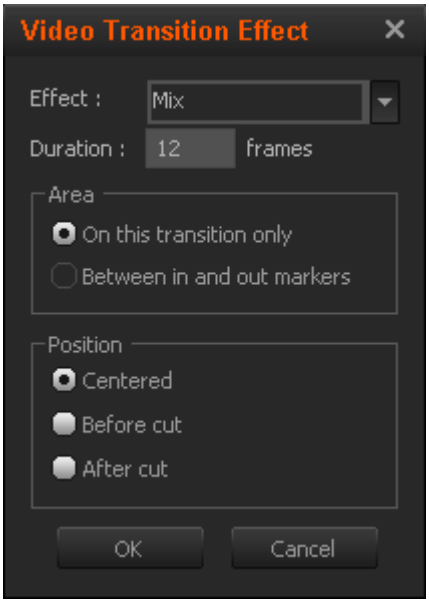
Mix

The Mix transition provides a dissolve effect from the clip to the left of the joint to the clip to the right of the joint.

This option will open a dialog box to determine the parameters for the Mix effect.

You need to define:

- the duration in frames
- the position of the mix:
  - before cut: on the clip before the joint
  - centered: centered on the joint
  - after cut: on the clip after the joint



Wipe

The Wipe transition is a gradual spatial transition from one video source to another, in which a vertical or horizontal border moves across the screen, to gradually replace the last images of the first clip with the first images of the next clip.

This option will open a dialog box to determine the parameters for the Wipe effect:

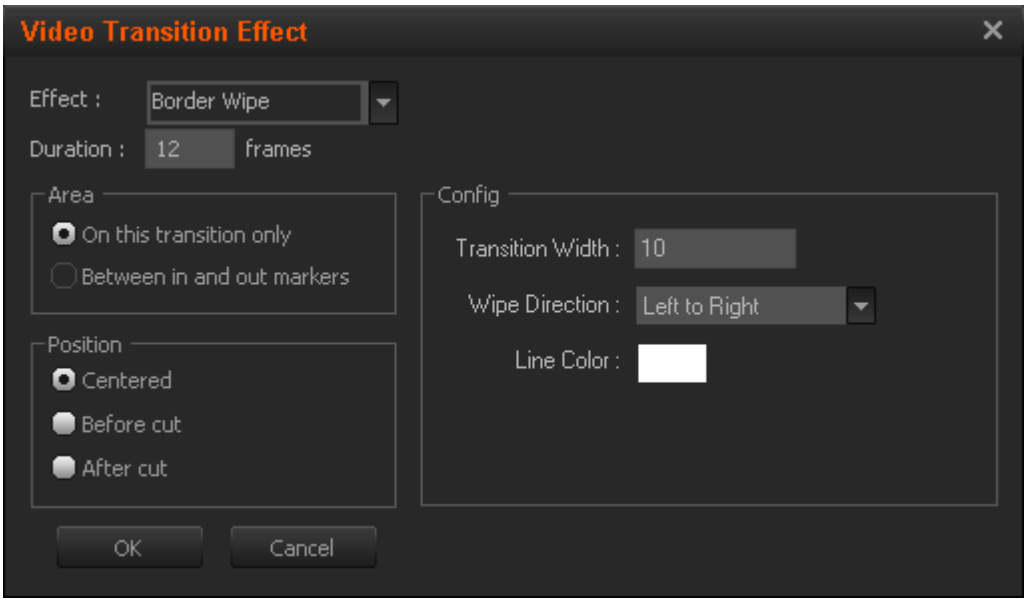
In addition to the effect duration and position, you need to specify:

- the transition width, i.e. the thickness of the line which separates the clip before and after the joint.
- the direction, i.e. from and to where the last image of the first clip will be wiped by the first image of the next clip.

Border Wipe

This is a wipe effect, on which a colored border is added to delimit the wipe effect on the image.

This option will open a dialog box to determine the parameters for the Border Wipe effect:



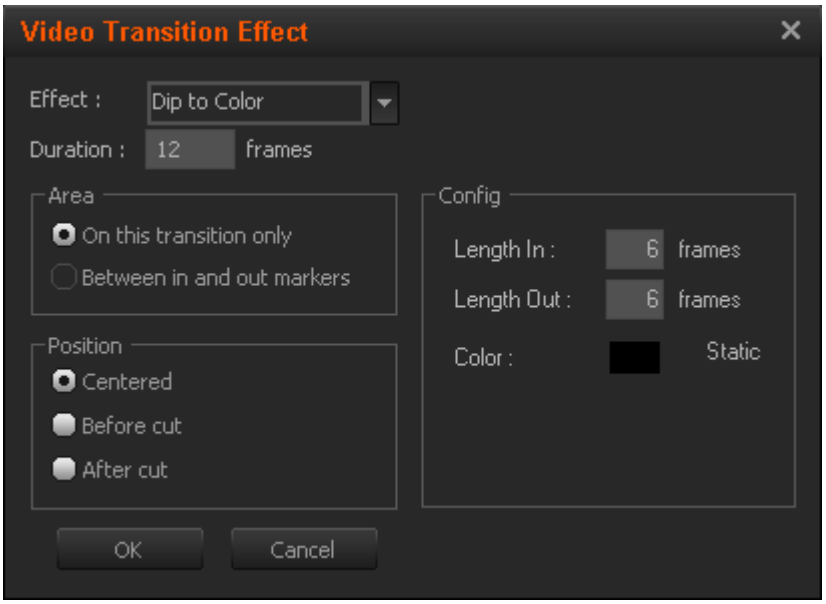
You can specify:

- the border width in the **Transition Width** field
- the border color, using a color chart, which opens when you click the colored rectangle in the **Line Color** field.

Dip To Color

The **Dip to Color** blends the first clip into a selected color, and then blends the color into the next clip. A typical use would be to mix to white in between clips in an interview or as a dip to black in an edit.

This option will open a dialog box to determine the parameters for the Dip to Color effect:



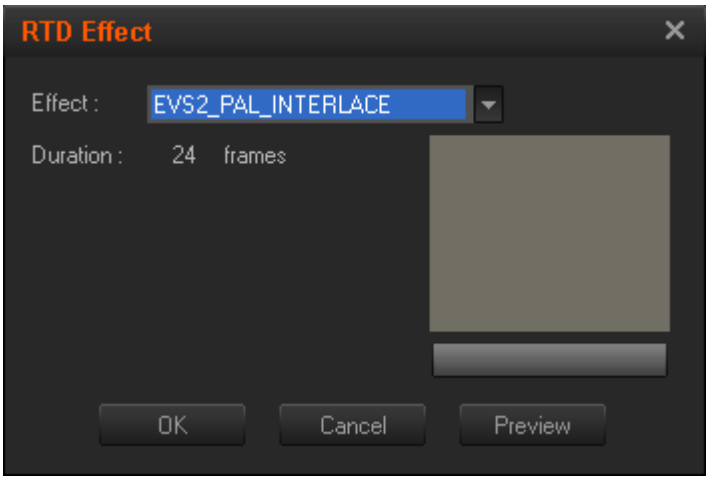
In addition to the effect duration and position, you need to specify:

- the color to be used in the transition from a basic color palette, which opens when you click the colored rectangle in the **Color** field.
- the length of the effect applied on the first clip (**Length In** field) and on the second clip (**Length Out** field).

Custom

This allows the selection of a transition between the clips with a graphic “keyed” over it as in the example below.

When the custom menu is selected, it shows a submenu either to choose an effect already used on the timeline, or to find an effect file to load using a normal windows type file search.



Note
The files for the custom wipes must already have been imported into the database. See the RTD section of Media Importer tab to do this.

9.2.5. Removing Transition Effects

You can remove the transition effects that have been defined in the same way as you have defined them, that is to say:

1. Select the transitions on which to remove the effects in one of the following ways:
   - To remove an effect on a single transition, position the mouse cursor next to the video transition on which you want to clear the effect.
   - To remove the effects on several transitions, add a mark IN and mark OUT beyond the relevant transitions.
2. Right-click and select **(Left / Right) Video Transition > Clear All** from the contextual menu.

9.2.6. Inserting Blocks of Color Frames

You can insert one or more frames of a selected color between two clips.

To do this, proceed as follows:

1. Select the transitions on which to insert colored frames:
   - To select a single transition, position the mouse cursor next to the relevant video transition.
   - To select several transitions, add a mark IN and mark OUT beyond the relevant transitions.
2. Select the button.

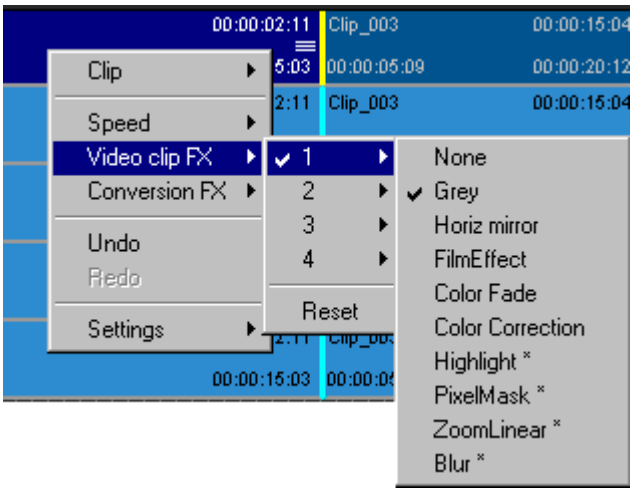
   This opens the Audio/Video Fx window.
3. In the Audio/Video Fx window, select the Color Insertion tab.

4. In this tab, select:
   - the requested color
   - the number of frames for the color insertion
   - the transitions where the insertion should be applied
5. Click **OK**.

9.3. Video Clip Effects

9.3.1. Introduction

Up to four different video effects can simultaneously be applied on the video clips of an edit. You can define them via the **Video Clip FX** command in the contextual menu you access when right-clicking a selected video element in the timeline:



Some of video effects can be applied to a group of clips.

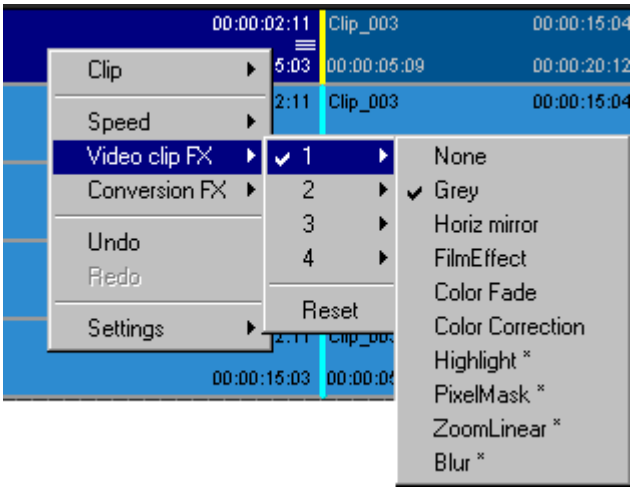
Other video effects (highlighted in the selection list with an asterisk *), can only be placed on a single clip at a time, as they involve setting a time within a clip to apply the effect (keyframe effects).

From the contextual menu, you can also remove the video effects using the **Reset** command.

9.3.2. How to Apply a Video Clip Effect

To apply video clip effects to one or several clips (for non key frame effects), proceed as follows:

1. Select the clips where to apply the effects in one of the following ways:
   - To define an effect on a single clip, position the mouse cursor next to the video transition on which you want to add the effect.
   - To define an effect on several clips, add a mark IN and mark OUT points to cover the clips to which the effects should be applied. The effects will be applied from the first clip where the mark IN point is defined, up to and including the last clip where the mark OUT is defined.
2. Right-click to access the contextual menu.



3. In the contextual menu, select the **Video Clip FX** command, then the number of the effect you want to define, and finally the effect type you want to define.

   If specific parameters have to be defined for the effect, the dialog box related to the selected video clip effect is displayed. Otherwise, the effect is directly applied to the clip.
4. Fill in the requested parameters for the video clip effect.
5. Click **OK**.

The effect is applied to the video clip element, which turns to a darker blue color in the timeline display:

One or more clip effects can be copied from a clip to another one as explained in section "Copying and Pasting Video Clip Effects" on page 172.

Note

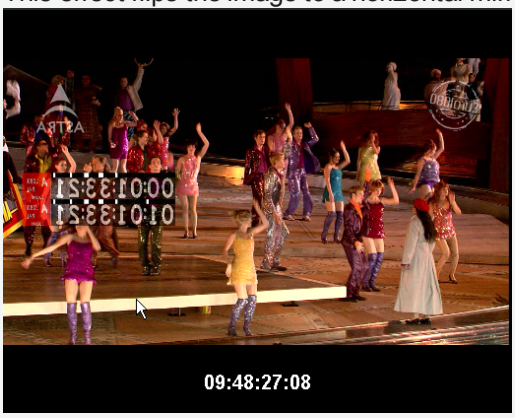
You can use the keyboard shortcut 7 to directly access the Clip Effect window. By default, the Video Effect window of the last created effect opens.

9.3.3. Simple Video Clip Effects

Grey, Horizontal Mirror and Film Effect

The following video clip effects are applied directly to the selected clips or to the clips between mark IN and mark OUT points as no additional settings need to be defined.

If you have defined marks, a dialog box will be displayed to allow you to change the clips on which the effect should be applied:

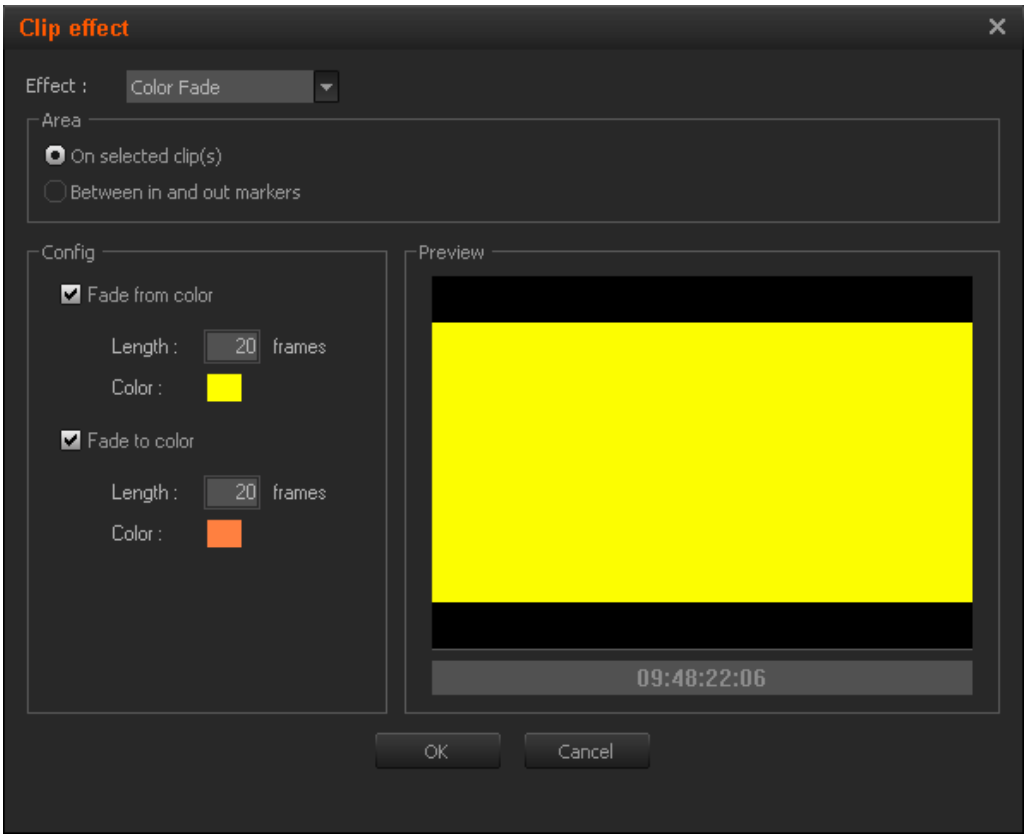
Video Clip Effect	Description
Grey (B&W)	This effect removes the color from a selected element.
Horiz(ontal) Mirror	This effect flips the image to a horizontal mirror of the original. 
Film Effect	This effect adds a film like quality to moving pictures.

Color Fade

This effect allows the addition of a fade up at the beginning of a clip and a fade out at the end of a clip to a selected color. When you select this effect in the contextual menu, the window below is displayed.

The **Fade from color** parameters allow specifying the color fade up at the beginning of the clip.

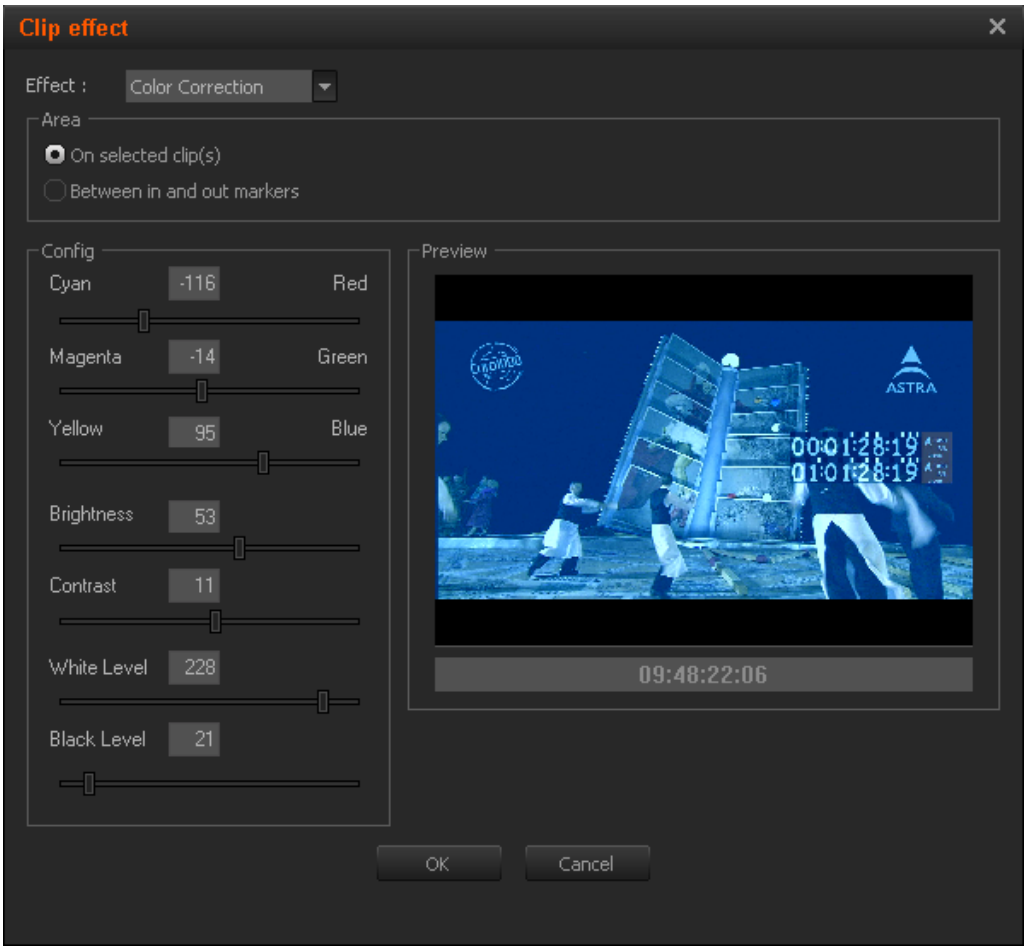
The **Fade to color** parameters allow specifying the color fade out at the end of the clip.



Color Correction

This effect makes it possible to change the RGB parameters to adjust the color of an image. When you select this effect in the contextual menu, the window below is displayed.

To adjust the color, you need to slide the selectors for the three colors. You can also modify the brightness, contrast, black level, and white level.



9.3.4. Video Clip Effects With Key Frames

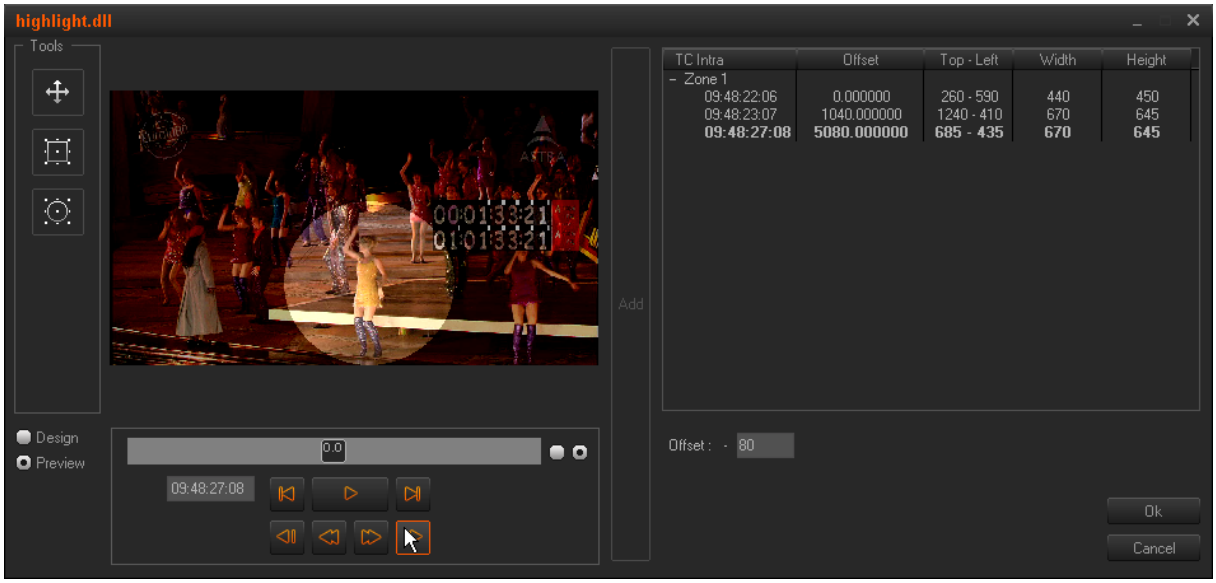
Introduction

These four options on the Video FX menu only appear for a single clip selection as they require keyframes to be added to the video element selected.

A keyframe is a drawing that defines the starting and ending points of a video effect. The addition of keyframes is a similar operation for all four effects and is detailed after briefly describing them.

Highlight

This option allows an object within the clip to be tracked over a period of time using a highlighted shape.

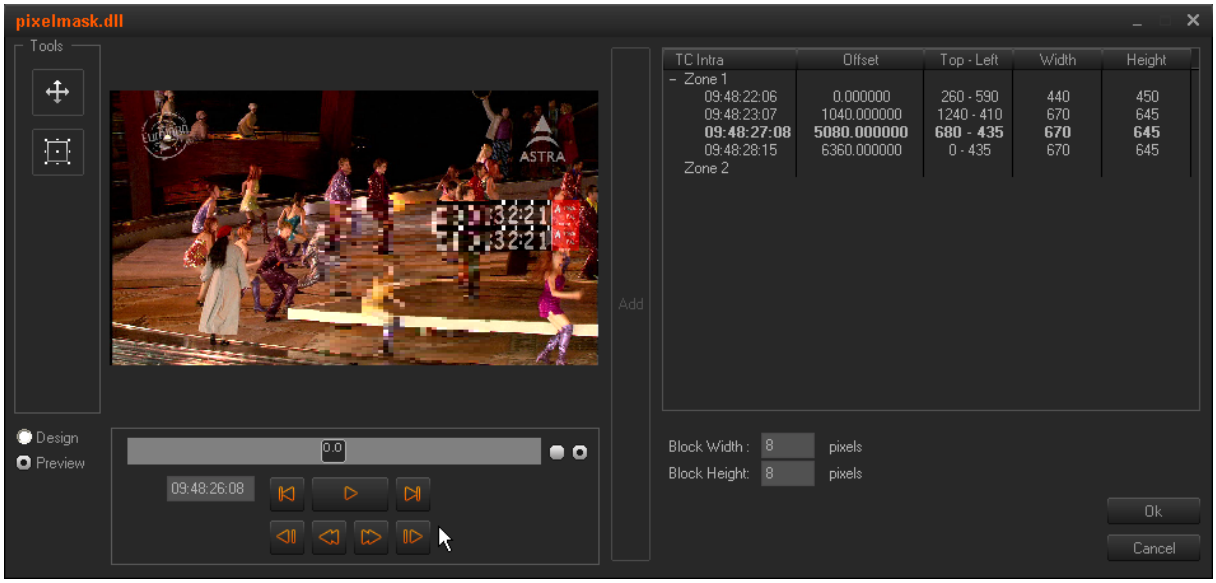


Blur

This option allows an area within the clip to be masked using a blurring effect. The area can be tracked over the period required.

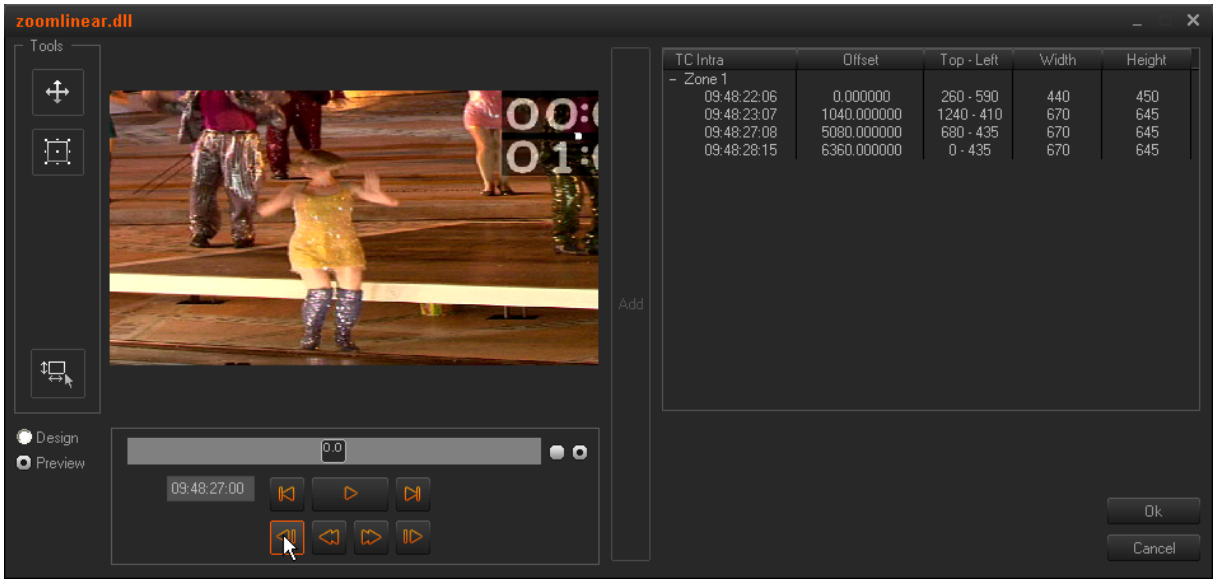
Pixel Mask

This option allows an area within the clip to be masked using a pixelation effect. The area can be tracked over the period required.



Zoom Linear

This option allows an area within the clip to be zoomed or enlarged over the period required within a clip.

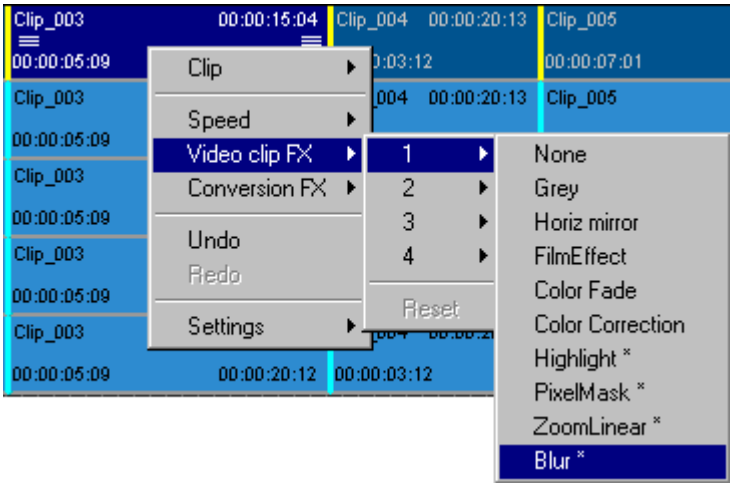


9.3.5. Adding Key Frames for an Effect

Each effect window varies slightly to offer the necessary parameters, but the principal of operation and basic layout is the same for all.

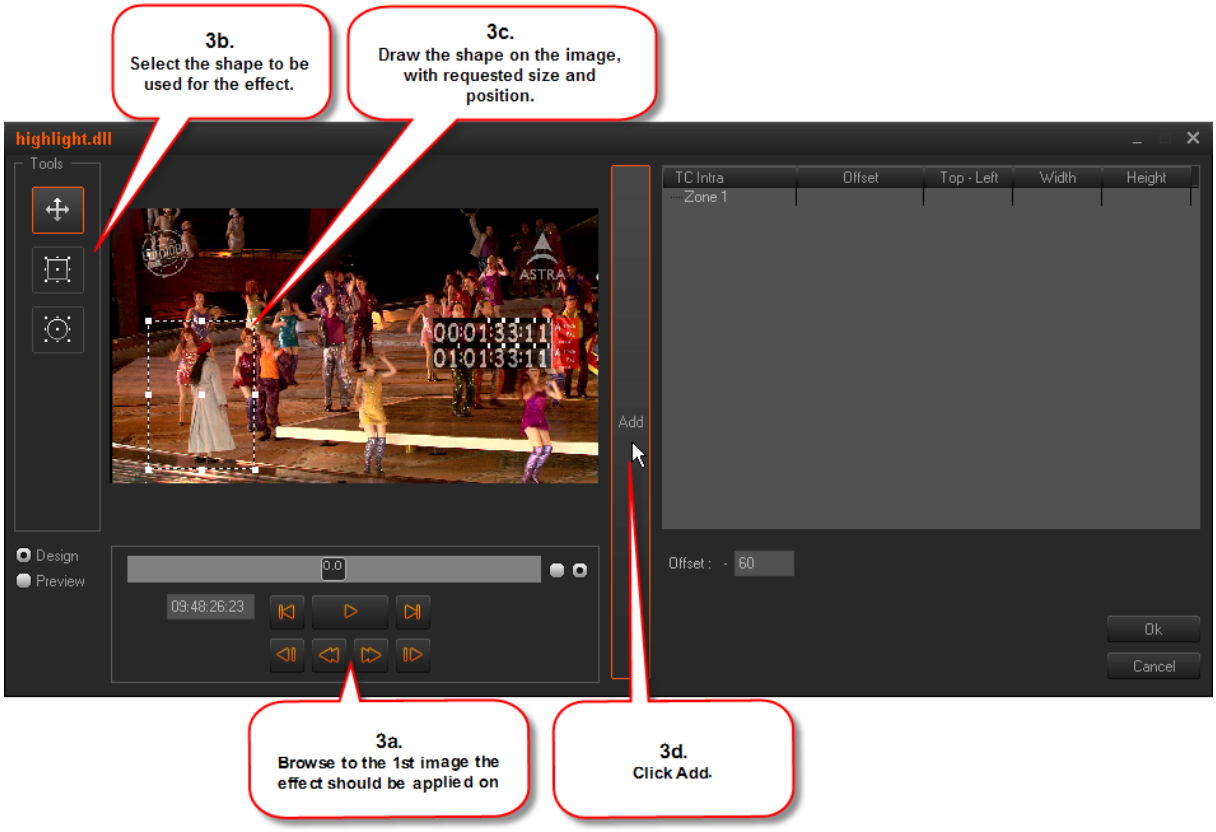
To add an effect with key frames (Highlight, Blur, Pixel Mask, Zoom Linear), proceed as follows:

1. Select the clip on which you want to define an effect.
2. Right-click to access the contextual menu. Then select the **Video Clip FX** command, the number of the effect you want to define, and finally an effect type you want to define.



The relevant window is displayed. By default, the Design mode is active. This is the mode to be used to define the effect.

3. Define how the effect should start on the first image as follows:



a. Using the transport commands, browse to the first image on which the effect should be applied.

b. In the Tools group box, select the shape you want to use for the area of the image to be highlighted, blurred, pixelated or zoomed.

c. Dragging the mouse, draw the shape on the image, with the requested size and position.

d. Click the **Add** button in the center of the window.

   The data related to the effect on this timecode is added to the right part of the window.

4. Define how the effect should end on the last image as follows:

   a. Browse to the last image on which the effect should be applied.

   b. Adapt the position and size of the shape on the image to your needs.

   c. Click the **Add** button.

      The data related to the effect on this timecode is added to the right part of the window.

5. Specify the parameters related to the effect.

   a. For the Highlight effect, you can change the default offset (contrast between highlighted area and surrounding area).

   b. For the Pixel Mask effect, you can change the default size of the pixel blocks.

   c. For the Blur effect, the **Blur Amount** can be set from 0 to 100. The **Feather** value determines the transition between the clear and the blurred image and can be used on oval forms only.

6. When the effect is defined, you can select the **Preview** radio button, and use the transport commands to have a preview of the defined clip effect.

7. Click **OK** to save the effect.

9.3.6. Copying and Pasting Video Clip Effects

Introduction

The same video clip effect (or set of effects) can be applied to several video clips in the timeline using the Copy and Paste functions.

The following principles apply to the Copy and Paste actions:

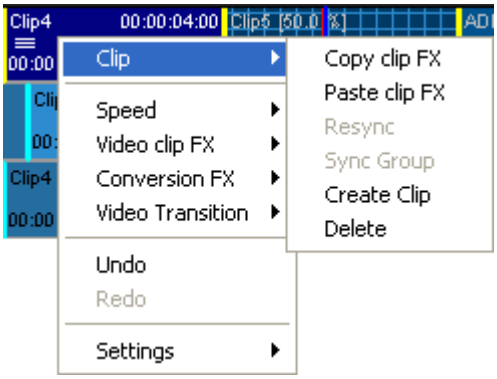
- The video clip effects that are copied are only those that:
  - are available in the Video clip FX contextual menu AND
  - do not require a keyframe effect.

  The other effects such as Speed or Conversion are not copied either.
- The Paste action resets and removes all existing effects already applied to the destination clips.

How to Copy a Video Effect

To copy a video effect, proceed as follows:

1. Select the clip with the already configured effects
2. Right-click to open the contextual menu
3. Select **Copy Clip FX**.



How to Paste a Video Effect

To paste these copied video effects, proceed as follows:

1. Select the clip you want to apply the copied effects to or set a mark IN and mark OUT points to cover the clips to which the effects should be pasted.
2. Right-click to open the contextual menu
3. Select **Paste Clip FX**.

9.4. Conversion Effects

9.4.1. Introduction

Each clip can be converted by the software in Xedio CleanEdit to match the format that the timeline is using. Conversion can be from and to 4:3 and 16:9 with Pan & Scan and Letterbox modes supported.

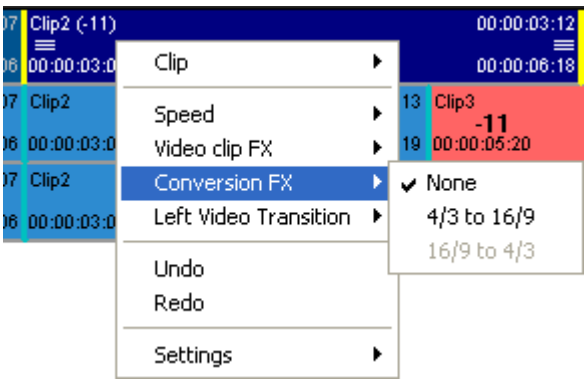
When you have created the Edit, you have selected the aspect ratio for the edit (or it was non-editable, as for 16:9 with HD video standards). Depending on the aspect ratio for the edit, you have selected a default conversion type.

You can change the mode used for the selected conversion type (for example PS, instead of the default conversion type which was LB), by adding a conversion effects to a clip or to several clips between a mark IN and mark OUT. You will not be able to change the conversion type itself since it is set at the beginning and has to remain unchanged in the whole edit.

9.4.2. Changing the Mode for the Conversion Type

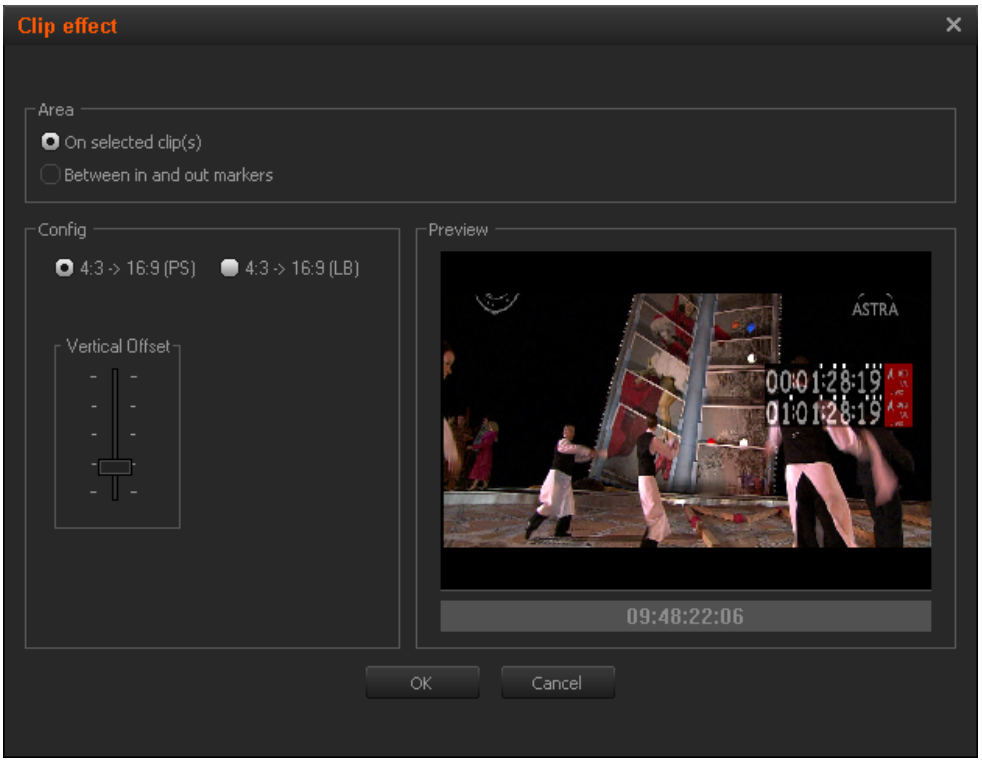
To change the mode for the conversion type for one or several clips, proceed as follows:

1. Select the clips where to apply the effects in one of the following ways:
   - To define an effect on one clip, click the requested clip
   - To define an effect on several clips, add a mark IN and mark OUT that covers the first and the last clip.
2. Right-click to access the contextual menu.



3. Select **Conversion FX** and the required effect.

   The Clip Effect window opens:



4. In the Config. group box, select the mode to be used for conversion type.
5. In PS mode, you can additionally select a Vertical Offset in 16:9 and also a Horizontal Offset in 4:3.
6. Click **OK**.

The mode and offset defined will be applied to the selected clips.

10. Advanced Audio Editing

10.1. Overall Audio Track Settings

The table below gives an overview of the main steps involved in the audio management in CleanEdit.

Step	See Section…
Set the audio type of each timeline track	"Track Name and Audio Type in the Timeline" on page 107.
Set the number and type of output audio tracks by means of the Audio Output matrix	"Audio Track Selection for the Output" on page 109.
In the Player area, select the audio channels/tracks to be loaded in the timeline	"Video and Audio Monitoring Tools" on page 79
In the Recorder area, select the output track to be monitored	"Selecting the Monitored Audio Track for an Edit" on page 92.

10.2. Audio Transition Effects

10.2.1. Ways to Add Audio Transition Effects

You can add audio transition effects using different methods:

- Adding the default audio transition effect to all new audio clips placed into the timeline.

  See section "Adding Automatically Default Audio Transition Effects" on page 176.
- Adding a transition effect on one or more contiguous audio elements of a track.

  See section "Adding Audio Transition Effects on Elements of the Same Track" on page 179.
- Adding a transition effect on one or more audio elements of the same clip.

  See section "Adding Audio Transition Effects on Elements of the Same Clip" on page 181.

If you add an effect on a transition where an audio transition effect has already been defined, the initial effect will be replaced by the new one.

10.2.2. Adding Automatically Default Audio Transition Effects

Once you click the button to activate the **AFX** function, a default audio transition is added to each new clip placed into the edit. The cross fade is the default audio transition initially defined in Xedio.

10.2.3. Modifying the Automatic Default Transition Effect

The default transition effect is defined in Xedio Manager: Software > Parameter Profiles > (Xedio)CleanEdit > Timeline tab: DefaultAudioTransFx.

However, you can modify the default audio transition effect as follows:

1. Right-click the button and select **Properties.**

   The Audio Transition Effect window is displayed.

2. Specify the requested default transition effect
3. Click **OK**.

The new transition effect is now the default transition associated with your user profile.

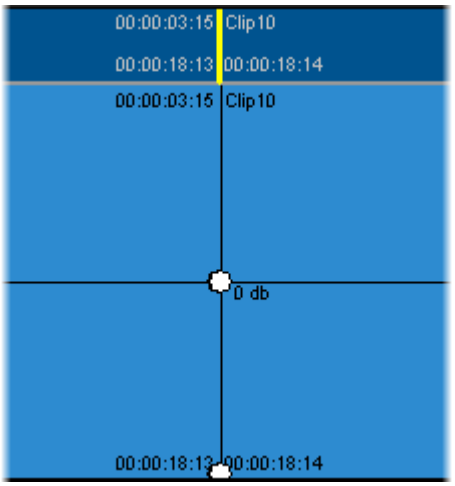
10.2.4. Possible Audio Transition Effects

When you select the audio transition effect you want to apply, you have the choice amongst four types of audio transitions effects. They are described and illustrated below by a zoomed display of the audio transition effect:

Cut

No transition effect is performed. The audio of the second clip replaces the sound of the first clip instantly. No blue line (which reflects a transition) is shown at the joint when a cut is present.

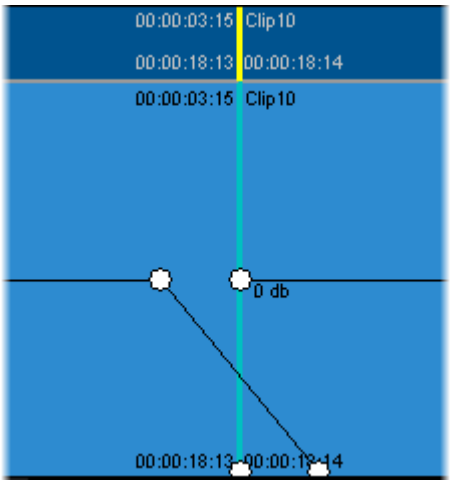
This is represented by the icon in the Audio Transition Effect window.



Fade out

The sound of the first clip fades out progressively while the audio of the second clip starts instantly from the transition point.

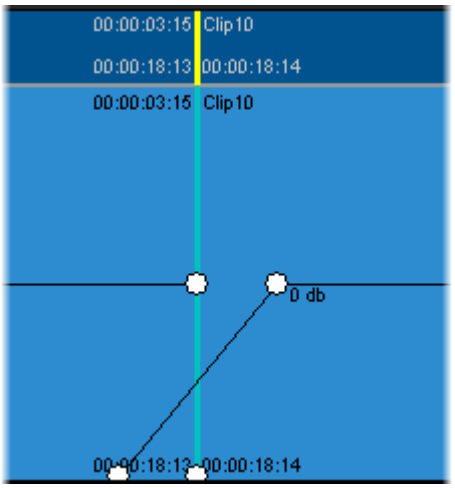
This is represented by the icon in the Audio Transition Effect window.



Fade in

The sound of the first clip disappears instantly at the transition point while the audio of the second clip starts progressively.

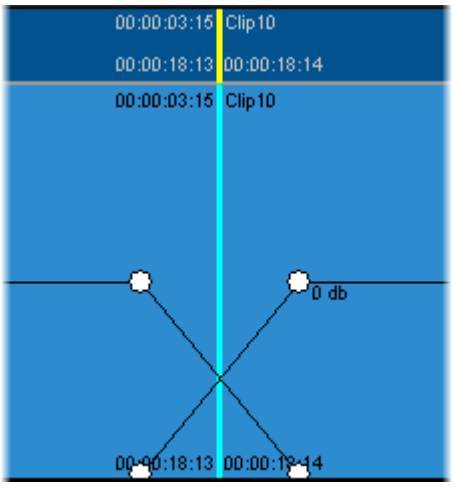
This is represented by the icon in the Audio Transition Effect window.



Cross fade

The sound of the first clip fades out while the sound of the second clip fades in.

This is represented by the icon in the Audio Transition Effect window.



10.2.5. Adding Audio Transition Effects on Elements of the Same Track

Introduction

You want to add audio transition effects to:

- a selected element OR
- contiguous elements

on a given audio track.

In this case, you will use the **(Left/Right) Audio Transition** commands in the contextual menu available on audio elements in the timeline.

See section "Possible Audio Transition Effects" on page 176 for more information on the various types of transition effects.

The following audio transition effects are available: Cut, Fade OUT, Fade IN, and Cross Fade.

How to Apply Audio Transition Effects On Elements on the Same Track

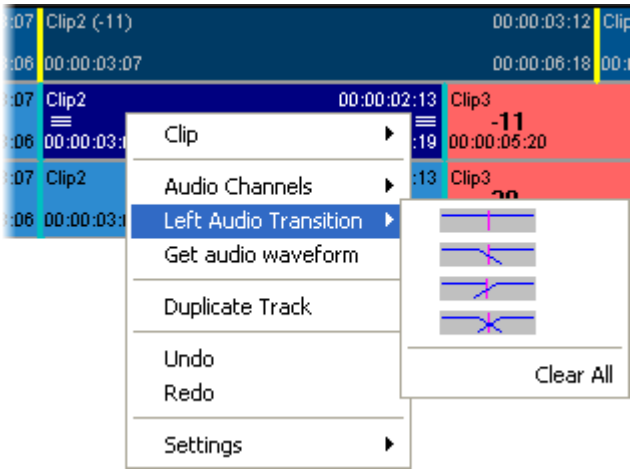
To apply audio transition effects to one element or contiguous audio elements of the same track, proceed as follows:

1. If you want to define a transition effect on several contiguous transitions, set a mark IN and mark OUT points to cover the clips on which the effects should be applied.

   Otherwise, the transition effect will be defined on the nearest transition to the position of the mouse cursor.

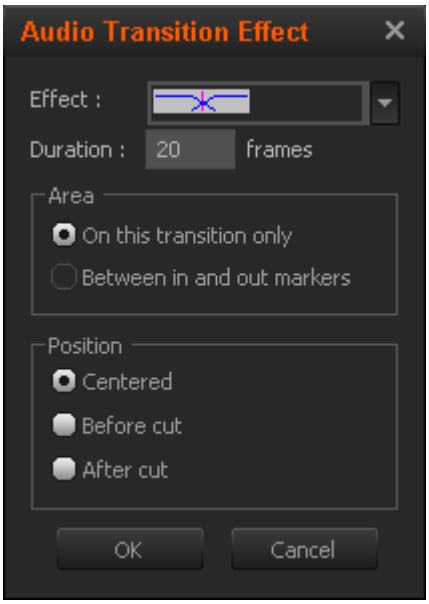
2. Right-click the mouse on the track where you want to define the transition effect either:
   - near the clip transition OR
   - between the define mark IN and mark OUT

   The contextual menu is displayed:



3. Select the requested effect type in the **(Left / Right) Audio Transition** command.

   The Audio Transition Effect window opens. In this window, you can still select another effect. The definition of the transitions where the effect will be applied, in the Area group box, cannot be modified.



4. In the Audio Transition Effect window, fill in the transition parameters to specify the duration and position of the transition effect.
5. Click **OK**.

A blue vertical line is added on the transition where the effect has been added:

Once you have assigned the basic type of audio transition, you can zoom and adjust the audio transition on the timeline, by clicking the **Zoom** button on the right hand side of the required track. The track will then expand vertically across all of the audio tracks to show the transition.

Note

You can also use the shortcut key + to directly call the Audio Transition Effect window.

10.2.6. Adding Audio Transition Effects on Elements of the Same Clip

Introduction

You can add an audio transition effect on one or more audio elements of the same clip.

In this case, you will use the Audio/Video FX window, accessed via the button.

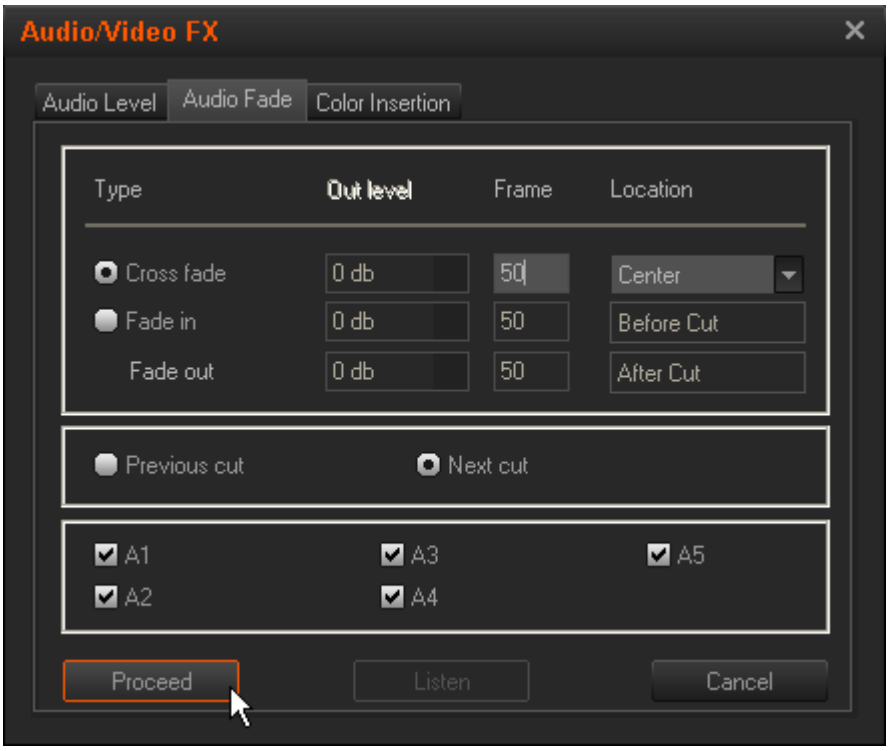
See section "Possible Audio Transition Effects" on page 176 for more information on the various types of transition effects.

The following audio transition effects are available: Cut, Cross Fade, Fade IN, and Fade OUT.

How to Apply Audio Transition Effects On Audio Elements of the Same Clip

To apply an audio transition on one or more audio elements of the same clip, proceed as follows:

1. Position the nowline on the clip for which you want to adjust the audio transitions.
2. Click the **Audio/Video FX** button to open the Audio/Video FX window and select the Audio Fade tab.

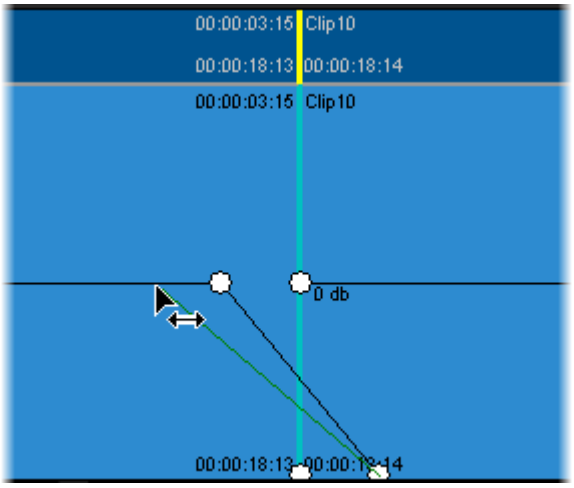


3. In the upper group box, specify the following:
   a. Select the type of transition you want to apply
   b. Type the number of frames the transition effect should last
   c. Select the location of the transition around the clip joint.
4. For a cross fade, select whether you want to apply the effect at the beginning of the clip (previous cut), or at the end of the clip (next cut) on which the nowline is positioned.
5. Select the tracks on which you want to apply the transition effect.
6. Click **Proceed**.

10.2.7. Adjusting Audio Transitions

To adjust manually audio transitions on a specific track, proceed as follows:

1. Click the **Zoom** button located on the right hand side of the audio track on which you want to adjust transitions.
2. In Zoom mode, identify the transition to modify.
3. Click the white nodes that correspond to the audio transition effect and move them to graphically display the required transition.



10.2.8. Removing Audio Transitions

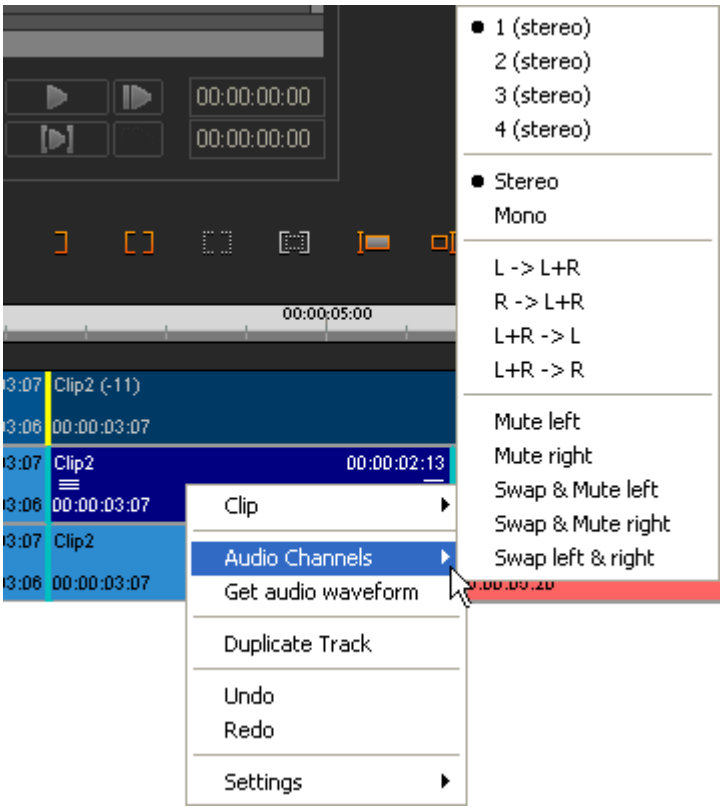
You can also remove the previously defined transition effects by right-clicking the track on which you want to remove the transition effects and selecting **Audio Transitions > Clear All** in the contextual menu.

10.3. Audio Routing, Swaps and Mutes

10.3.1. Default and Specific Audio Routing

You can define default audio routing, as well as swaps and mutes on the audio channels of a stereo track via the **Audio Routing** button . This is explained in section "Audio Routing for Stereo Tracks" on page 113. These options will be valid for each new clip added to the edit.

You can also define specific audio routing, swaps and mutes on an audio element of a stereo track. These functions are available as you right-click on the selected element and choose **Audio Channels** from the contextual menu.



10.3.2. Possible Audio Channel Functions

The functions available via the **Audio Channels** command are divided into four groups of sub-commands. A mark is displayed in front of the commands applied to the selected elements:

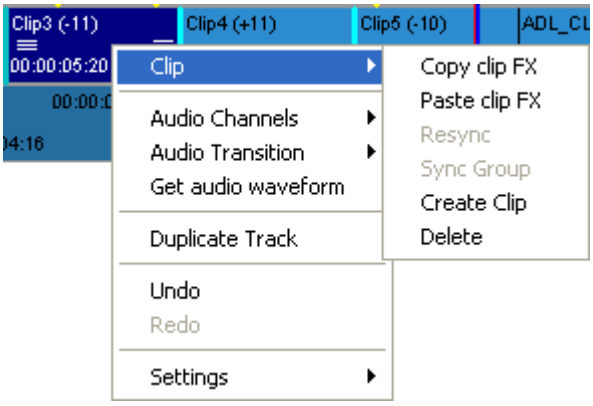
Group of Sub-Commands	Description
● 1 (stereo) 2 (stereo) 3 (stereo) 4 (stereo)	These commands allow specifying the source track you want to be applied to the selected element.
● Stereo Mono	These commands allow the user to specify whether the track should be output as a mono or as a stereo track.

Group of Sub-Commands	Description
L -> L+R R -> L+R L+R -> L L+R -> R	These commands allow the user: • to route the left or right audio channel to both stereo channels • to mix both stereo channels into one audio mono channel
Mute left Mute right Swap & Mute left Swap & Mute right Swap left & right	These commands allow the user: • to mute the left or right audio channel • to swap the left and right audio channels • to swap the left and right channels and mute one of them.

Note
Selecting **Stereo** from the **Audio Channels** command will reset the audio channel effects.

10.3.3. Copying and Pasting Audio Routing Actions

The audio effects defined on one element using the **Audio Channels** command can be copied and pasted to several audio elements and audio tracks in the timeline, via the Copy and Paste functions:



The following principles apply to the Copy and Paste actions:

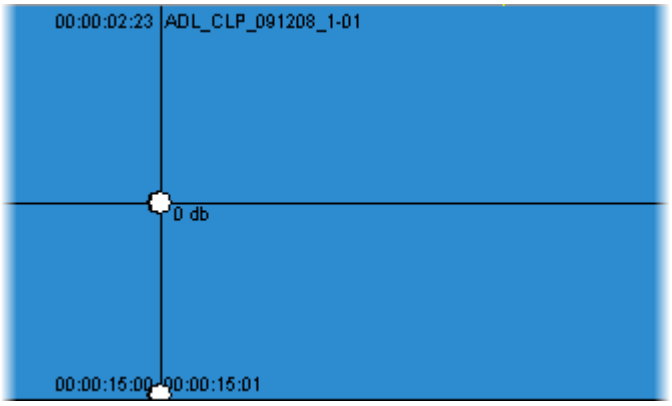
- The audio effects that are copied are only those that are available in the **Audio Channels** command of the contextual menu. The source selection is not copied.
- The Paste action resets and removes all existing effects already applied to the destination clips.

To copy and paste an audio effect, proceed the same way as for the video effects. See section "Copying and Pasting Video Clip Effects" on page 172 for a detailed procedure.

10.4. Audio Level Adjustments

10.4.1. Introduction

In Zoom mode the level of the audio clips in the edit are also displayed. The horizontal line on the expanded audio clip represents its audio level. The original audio level of the source clip is referred to as the 0db level:

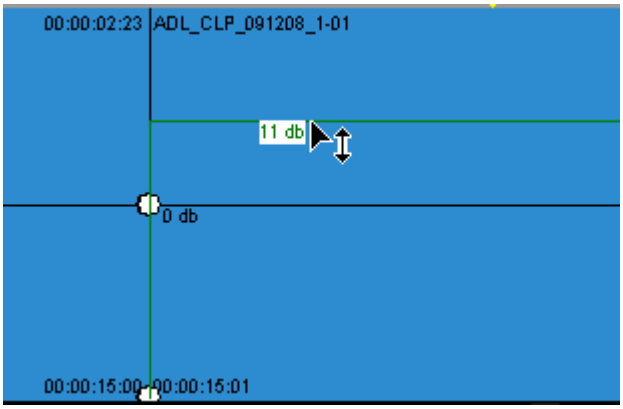


10.4.2. How to Adjust the Audio Level on a Single Clip

To adjust the audio level on a single clip, proceed as follows:

1. In Zoom mode, position the mouse on the horizontal line (audio level) of the clip to be adjusted.
2. When the mouse pointer shows a double headed arrow, click and hold on the left button of the mouse.

3. Move the audio level line up or down to respectively increase or decrease the audio level of the clip:



The db increase compared to the original audio level is specified on the audio level line as you move it.

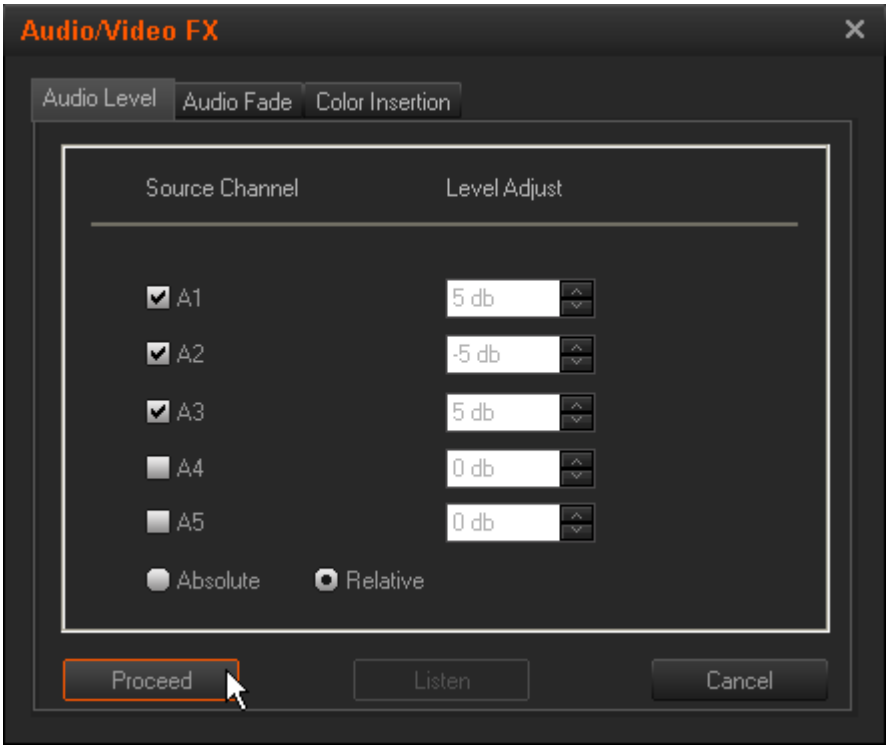
4. Release the mouse when you have reached the requested audio level.

10.4.3. How to Adjust the Overall Level of a Track

To adjust the audio level of a whole track, proceed as follows:

1. Click on the **Audio/Video FX** button .

The Video/Audio FX window opens with the focus on the Audio Level tab:



2. Select the **Source Channel** check boxes corresponding to the tracks whose audio level you want to adjust.

3. In the **Level Adjust** box corresponding to each track, select how many dbs you want to add to or remove from audio level of the track.
4. Select the adjustment mode as follows:
   a. If you want to apply the specified db value to the current audio level, tick the **Relative** radio button.
   b. If you want to apply the specified db value to the original audio level (0db), tick the **Absolute** radio button.
5. Click **OK**.

The audio level of the whole track is adjusted according to the defined value and adjustment mode.

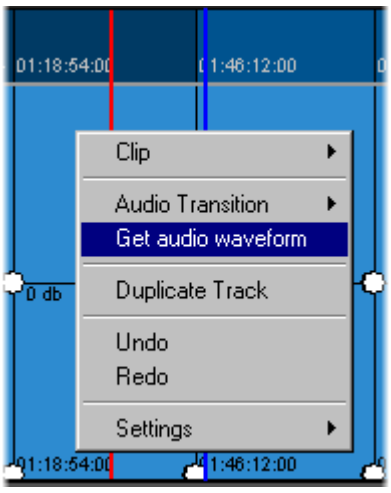
10.5. Miscellaneous Audio Features

10.5.1. How to Generate the Waveform of an Audio Element

You can generate the waveform for audio element(s) of an audio track as follows:

Generating the waveform of a stereo element

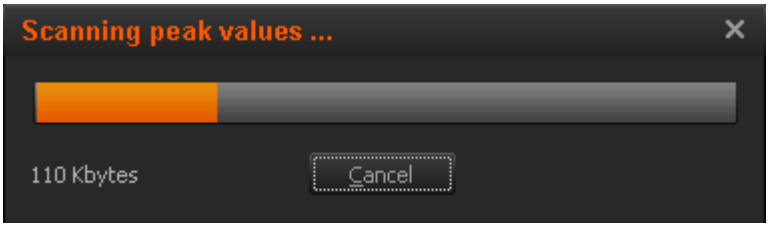
1. Right-click on the element for which you want to generate the waveform.
2. Select **Get audio waveform** from the contextual menu:



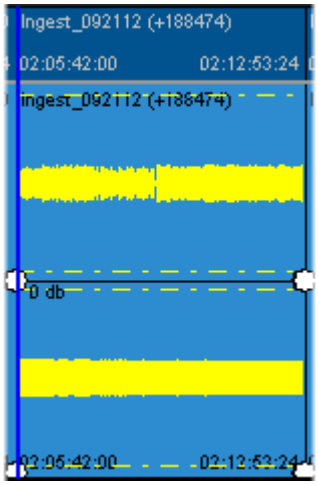
Generating the waveform of a 5.1 element

1. Right-click on the element for which you want to generate the waveform.
2. Select **Get audio waveform** from the contextual menu and the channels for which you want to get the waveform:

The following message will display while the application is generating the waveform:

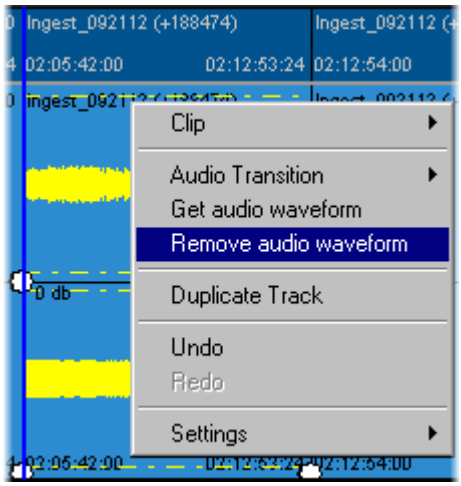


Once the waveform has been generated, click the **Zoom Track** button to view it:



10.5.2. How to Remove an Audio Waveform

To remove the audio waveform on an audio element, right-click on this element and select **Remove audio waveform** from the contextual menu:



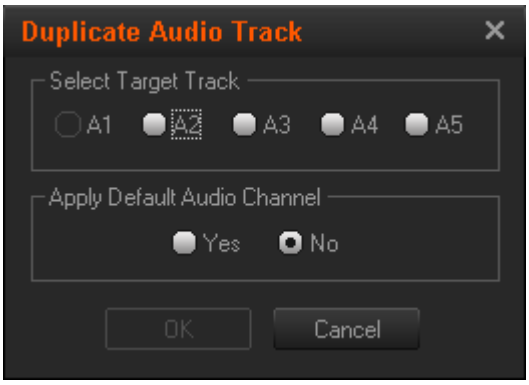
10.5.3. How to Duplicate an Audio Track

You can copy and paste a full audio track to another track. If the destination track is not empty, its content will be replaced by the copied track.

To duplicate an audio track, proceed as follows:

1. Right-click on an audio track and select **Duplicate Track** in the contextual menu.

   The Duplicate Audio Track window opens.

   Only the tracks with the same audio type as the copied track are displayed in the Select Target Track field group.

2. In the Select Target Track field group, select the track to which you want to duplicate the copied track.

3. In the Apply Default Audio Channel field group, do one of the following:
   - If you want to apply the default Audio Channel settings (that is stereo), select **Yes**
   - If you want to apply the Audio Channel settings of the copied track, select **No**.

The audio track is copied to the destination track.

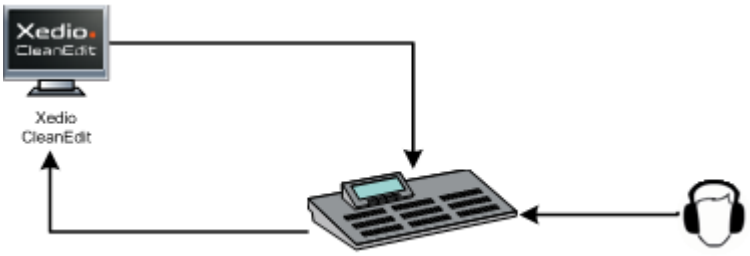
11. Voiceover, Logo, Graphics, Text or Subtitles

11.1. Adding Voiceover

11.1.1. Introduction

CleanEdit provides a tab entirely dedicated to the recording of voiceover on a specific audio track over one or several parts of the edit. The current section describes the voiceover process managed with CleanEdit.

Some users prefer to record voiceover with an external audio mixer. This process, schematized hereafter, is supported by CleanEdit as well. Then, the audio mixer stereo output is used as input for the CleanEdit audio board.

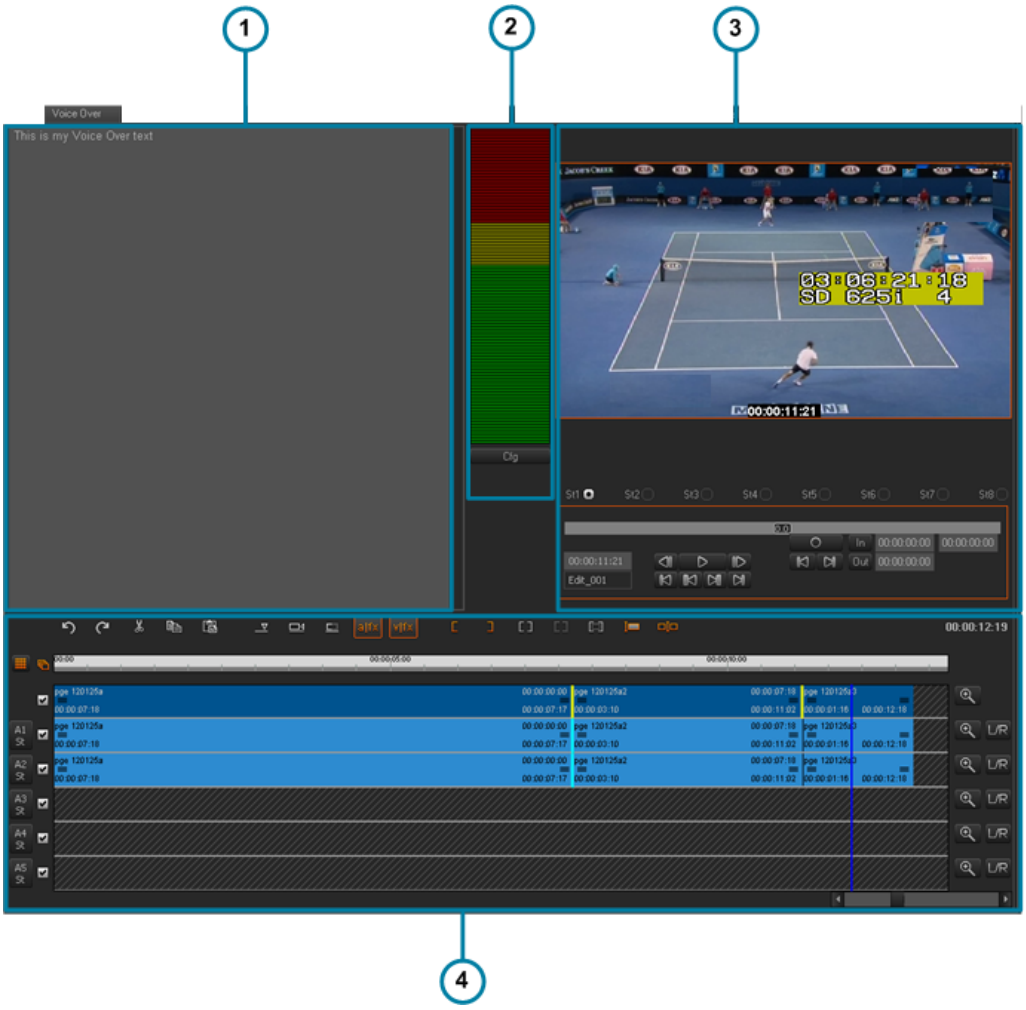


As the use of digital audio capture devices could cause a variable delay between the recorded audio and the video, this can be corrected thanks to the **Latency Delay Offset** setting in Xedio Manager > Softwares > Parameter Profiles > CleanEdit > Voiceover.

11.1.2. Voiceover Tab Overview

Illustration

The VoiceOver tab contains the areas highlighted on the screenshot below:



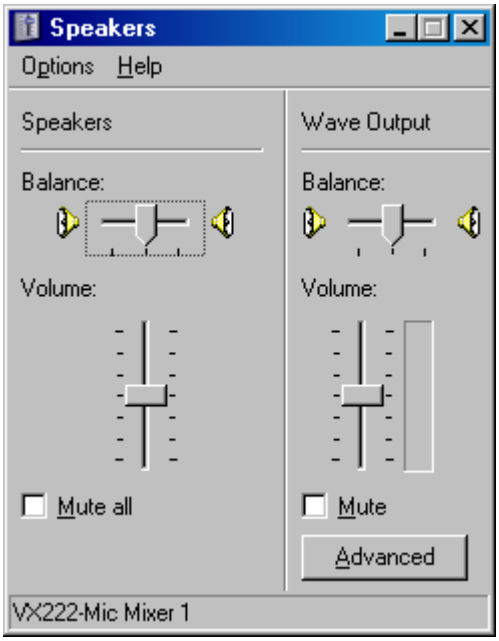
Area Description

The table below describes the various parts of the Voiceover tab:

Part	Name	Description
1.	Text Editor	The text area allows the addition of the voiceover script on the display. A script can be typed or added using Copy & Paste commands from another application. It can also be retrieved from a MOS story through EVS ActiveX component or from the Xedio Cutter application.
2.	Audiometers	The audio meters provide an indication of the input audio level for the microphone when recording a voiceover.
3.	Recorder pane	This display area is similar to the Recorder pane on the Edit tab in that the transport controls are the same, but has some different features to record the voiceover. The description of the common transport buttons and fields can be found in section "Playing the Edit in the Recorder Pane" on page 89. The other buttons and fields, specific to the Voice Over tab, are described in the next sections.
4.	Timeline pane	This area contains the edit to which voiceover is added..

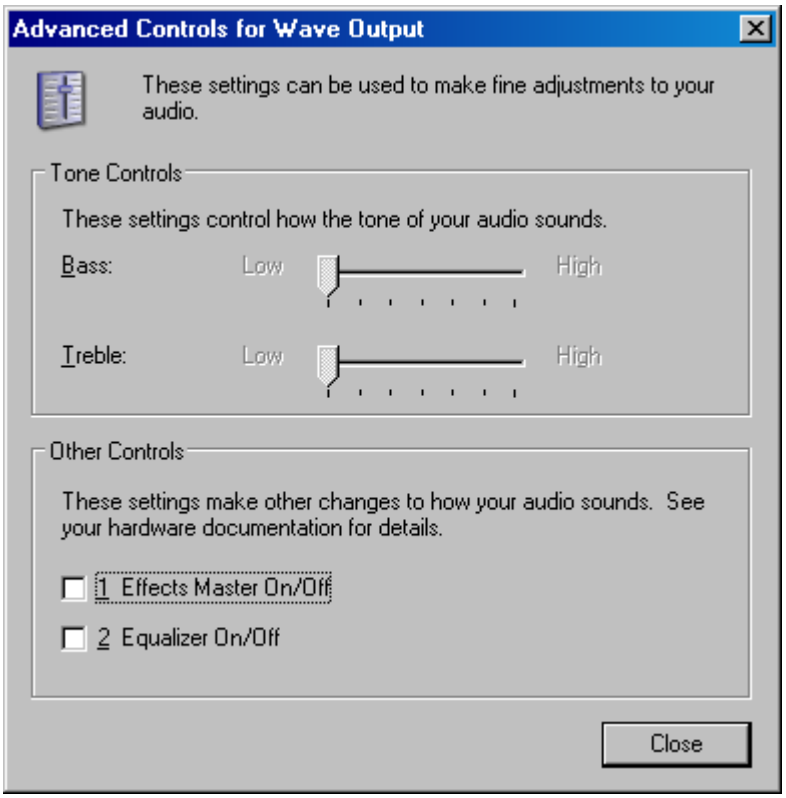
Audio Meters

Underneath the meter is a **Cfg** button that displays the audio level configuration to adjust the settings.



The audio card fitted to the workstation being used may offer more choices in configuring the recording parameters, please consult the user manual for the device used for more details.

The **Advanced** button from the Wave Output area gives access to more controls:


Advanced Controls for Wave Output
These settings can be used to make fine adjustments to your audio.
Tone Controls
These settings control how the tone of your audio sounds.
Bass:
Low
High
Treble:
Low
High
Other Controls
These settings make other changes to how your audio sounds. See your hardware documentation for details.
1 Effects Master On/Off
2 Equalizer On/Off
Close

Note
The Digigram board controls the configuration for the audio inputs and outputs of the workstation. It is therefore recommended to configure the Digigram board as shown on the screenshots from "Appendix 3 – Digigram Hardware Settings" on page 235.

11.1.3. Voiceover Process

Process Overview

The voiceover recording process includes four steps:

1. See section "Defining the Area to Record the Voiceover" on page 196.
2. See section "Recording the Voiceover" on page 196.
3. See section "Checking the Recorded Voiceover" on page 197.
4. See section "Attenuating other Tracks when Using Voiceover" on page 198.

Defining the Area to Record the Voiceover

Mark In

Place the nowline in the timeline where the voiceover should start, then click the **Mark IN** button in the timeline or recorder area to define the IN point of the recording area for the voiceover.

The timecode of the mark IN point will be displayed in the recorder panel next to the IN button.

Mark Out

Place the nowline in the timeline where the voiceover should end, then click the **Mark OUT** button in the timeline or recorder area to define the OUT point of the recording area for the voiceover.

The timecode of the mark OUT point will be displayed in the recorder panel next to the OUT button. The duration of the voiceover will also be shown on the recorder area.

Note
It is possible to start a voiceover recording without adding an OUT point. In this case, the voiceover recording would continue until you stop manually the recording clicking the **Recording** button.

Recording the Voiceover

Launch the recording process by clicking the **Rec** button.

…1 (count down)

When the user selects the **Rec** button when mark IN and mark OUT have been set, a countdown starts and is shown on the button itself. It indicates the number of seconds before the IN point of the voiceover and allows to user to get ready for the recording. During the countdown CleanEdit will play the edit leading up to the IN point for the voiceover.

Note
The Preroll value for a voiceover can be set in Xedio Manager. Please refer to the Xedio Manager user manual for further details.

When the countdown is over, the **Rec** button displays a red button .

The edit is played and the system keeps recording until the OUT point is reached or until the user clicks the **Rec** button again to stop recording.

The track where the voiceover clip will be placed is the first stereo track that is selected looking from the bottom of the timeline. A dialog box will open to ask which track to place the recorded voiceover on if this would overwrite some elements already present on the timeline.

Warning Message
Voiceover is overwriting some other blocs !
Track A1 (overwrite existing blocs)
Track A2 (overwrite existing blocs)
Track A3 (overwrite existing blocs)
Track A4 (overwrite existing blocs)
Track A5 (overwrite existing blocs)
OK

Only the stereo tracks can be selected.

Checking the Recorded Voiceover

Go to Voiceover Mark IN

Clicking the **Goto Mark IN** button, located below the **Rec** button, moves the current position of nowline to the IN point corresponding to the beginning of the last voiceover recording.

This button when combined with the **CTRL** key from the keyboard, moves the nowline to the some seconds (Preroll value) before the beginning of the last recording, and directly launches a playback to enable the recording to be checked.

Go to Voiceover Mark OUT

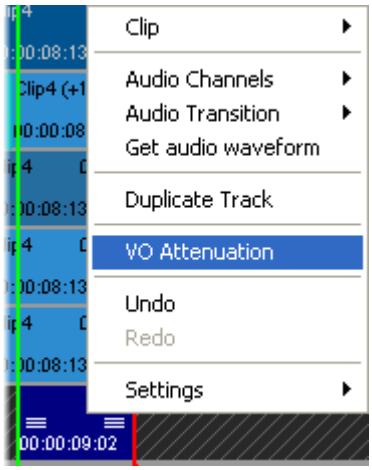
Clicking the **Go to Mark OUT** button, located below the **Rec** button, moves the current position of nowline to the OUT point corresponding to the end of the last voiceover recording.

This button when combined with the **CTRL** key from the keyboard, moves the nowline to some seconds (Preroll value) before the end of the last recording and launches a playback to enable the voiceover OUT point to be checked.

Attenuating other Tracks when Using Voiceover

Using a right click on a voiceover track brings up a contextual menu offering the choice to add attenuation to any audio elements that are vertically adjacent to the recorded voiceover section. This means that the audio tracks will fade to a lower level for the duration of the voiceover.

When attenuation is present, the voiceover element color changes to a darker shade to indicate that the attenuation is switched on. See section "Color Representation on the Timeline Display" on page 100.



Note
The level of attenuation and other settings such as fade in and out values are set in the Software > Parameter Profiles area of Xedio Manager. Please refer to the related user manual for more details.

11.2. Adding a Logo or Graphic

11.2.1. Introduction

Logos or still graphics can be added to sections of the edit.

This is done by adding tags, which are reference points marked on the timecode bar to trigger an event.

Tags are created and managed via the Tag Manager window.

Provided that the right plugin has been integrated with CleanEdit, graphics can also be taken from vizRT or ORAD.

11.2.2. Tag Manager Window

Possible Ways to Access the Tag Manager Window

Tags are created from the Tag Manager window.

CleanEdit provides several possible ways to call this window.

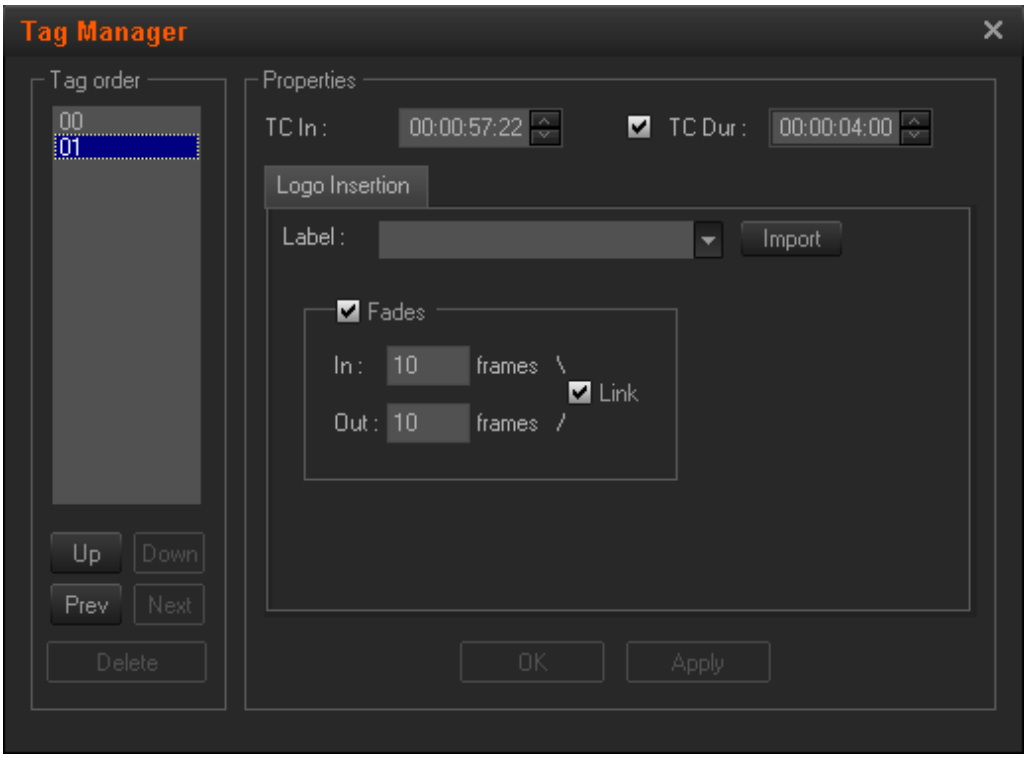
- Right-click on the Timecode bar and select **Add tag** from the contextual menu.
- Add a Mark IN point and a Mark OUT point in the timeline and press .

  See section "Adding Marks" on page 118.
- Place the nowline in the timeline and press .

Illustration

The Tag Manager window presents tabs specific to the action performed: logo insertion, external graphics, integration with ORAD, integration with vizRT. Their display must have been individually enabled from Xedio Manager (**Softwares > Parameter Profiles > CleanEdit > Timeline > Tag**

It contains however some areas common to all of them.



Fields in the Tag Manager Window

The Tag Manager window contains the following user interface elements.

Tag Order group box

Tag List (00, 01, 02, ...)

List of the tags defined in the timeline. You can select one or more tags at a time.

Up

Button to move the selected tag higher in the tag list.

Down

Button to move the selected tag lower in the tag list.

Prev

Button to select the previous tag in the tag list.

Next

Button to select the next tag in the tag list.

Delete

Button to delete the selected tag(s).

Properties group box

TC In

Spin box to type the tag IN point, in other words the timecode from when the graphic will be displayed (on the top of the video).

- When you use the contextual menu to call the Tag Manager window, the value for the tag IN point corresponds to the position of the mouse on the Timecode bar when you right-click on the mouse.
- When you use the keyboard shortcut to call the Tag Manager window, the tag IN point and duration values will be retrieved from the timeline Mark IN and Mark OUT points if they are defined. Otherwise, the nowline position will be used as the tag IN point with the default duration of 4 seconds.

TC Dur check box

Check box to specify whether you want to define how long the graphic should be displayed:

- If it is not selected, the graphic will be displayed until the end of the edit.
- If it is selected, you can specify how long the graphic should be displayed in the **TC Dur** field. By default, the duration is 4 seconds.

TC Dur (field)

Spin box to define how long the graphic will be displayed from the tag IN point.

Logo Insertion Tab

Label

Drop-down box to select the file containing the graphic or logo to be inserted. The TIFF or TAG files already included in the project will be displayed in drop-down list.

If the requested file is not available in the drop-down list, you first need to import it, using the **Import** button.

Import

Button that opens the KM Importer dialog box, from where you can browse to and import the requested graphic file.

Fades

Check box to specify whether you want the graphic to appear and disappear using a fade effect:

- If it is not selected, the graphic will be fully displayed and will disappear in Cut mode.
- If it is selected, you can specify below the duration of the fade in and fade out effects for the graphic display.

In: X frames

Field to specify the duration, in frames, of the fade in effect when the graphic will appear on the clip.

Out: X frames

Field to specify the duration, in frames, of the fade out effect when the graphic will disappear.

Link

Check box to synchronize the fade in and fade out durations.

11.2.3. Possible Actions on Tags

IPD Xedio Plugin allows the user to perform various actions:

Action	See Section …
Inserting a logo or still graphic from a TC IN to a TC OUT (IN and OUT points of the tag), with a fade in and fade out.	"Inserting a Logo or Graphic" on page 202.
Inserting an ORAD graphic to the edit.	"Inserting a ORAD Graphic within the Edit" on page 204.
Changing the tag position on the timeline.	"Moving Tag Points" on page 207.
Extending or reducing a tag duration.	"Moving Tag Points" on page 207.
Changing the tag order when several tags are defined.	"Tag Manager Window" on page 199 (Tag Order group box).
Deleting a tag.	"Deleting Tags" on page 208.

11.2.4. Inserting a Logo or Graphic

Introduction

The logo or graphic to be inserted are usually TIFF or TGA file with a key layer. The file is either already present in the current project or can be imported as you define the tag for the graphic insertion.

How to Set a Tag in the Timeline

To set a tag, proceed as follows:

1. Set the tag positions in the timeline in one of the following ways:
   - Right-click on the Timecode bar and select **Add tag** from the contextual menu.

     The tag TC IN corresponds to the position of the right-click and the **TC Dur** value is the **Tag Default Duration** value.

- Add a Mark IN point and a Mark OUT point in the timeline and press .

  See section "Adding Marks" on page 118.

  The **TC In** value corresponds to the Mark IN point and the **TC Dur** value is calculated based on the Mark OUT point.

- Place the nowline in the timeline and press .

  The **TC In** value corresponds to the nowline position and the **TC Dur** value is the **Tag Default Duration** value.

The Tag Manager window opens. The tag number is displayed on the left pane and highlighted.

2. (optional) Modify the timecode where the graphic should be inserted by typing the requested timecode in the **TC In** field.

3. If you want to specify how long the graphic should be displayed, select the check box in front of the **TC Dur** field. Otherwise, the graphic will be displayed until the end of the edit.

   The default duration value is 4 sec. The value is set from Xedio Manager under **Softwares > Parameter Profiles > CleanEdit > Timeline > Tag Default Duration**.

4. (optional) Modify the duration for the graphic display in the **TC Dur** field.
5. The **OK** button will become available as soon as you have selected a logo or a graphic.

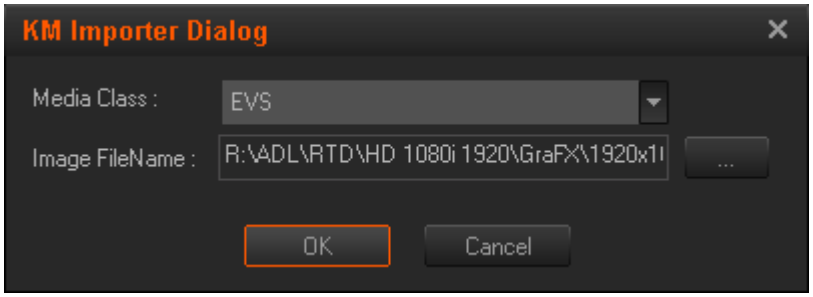
How to Insert a Logo or Graphic

A logo will be selected from the Logo Insertion tab of the Tag Manager window.

To insert a logo, proceed as follows:

1. Set a tag as defined here above.
2. Select the logo from the Logo Insertion tab by doing one of the following actions:
   - If the graphic is already present in the project, select the file directly from the **Label** drop-down field.

- If the graphic is not available in the project, click the **Import** button to be able to select and import it via the KM Importer dialog box.



3. (optional) Set transition effects for the logo display. If you want the logo to appear and disappear in a fade in and fade out effect,
   a. Select the **Fades** check box. Otherwise, the logo will appear and disappear in Cut mode.
   b. Specify the duration (frames) for the fade in and fade out effect.

4. Click **OK**.

Tag Display

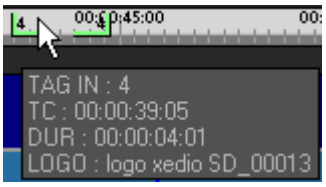
Tags are displayed on the Timecode bar with a number.

Tags created from the Logo Insertion tab of the Tag Manager window are green.

When tags are selected, the markers become purple:

.

A tooltip appears when moving the mouse over a tag marker:



11.2.5. Inserting a ORAD Graphic within the Edit

Introduction

ORAD Maestro provides a complete on-air graphics system for TV stations. This system has been integrated with the Xedio Suite through an ORAD plugin, so users can choose graphics present on the ORAD server and insert it in the edit loaded on the CleanEdit timeline.

This is done by means of tags added to the timeline.

An edit containing ORAD graphics can be exported. The graphics will then be "burned" within the video.

How to Set a Tag in the Timeline

To set a tag, proceed as follows:

1. Set the tag positions in the timeline in one of the following ways:
   - Right-click on the Timecode bar and select **Add tag** from the contextual menu.

     The tag TC IN corresponds to the position of the right-click and the **TC Dur** value is the **Tag Default Duration** value.
   - Add a Mark IN point and a Mark OUT point in the timeline and press .

     See section "Adding Marks" on page 118.

     The **TC In** value corresponds to the Mark IN point and the **TC Dur** value is calculated based on the Mark OUT point.
   - Place the nowline in the timeline and press .

     The **TC In** value corresponds to the nowline position and the **TC Dur** value is the **Tag Default Duration** value.

   The Tag Manager window opens. The tag number is displayed on the left pane and highlighted.
2. (optional) Modify the timecode where the graphic should be inserted by typing the requested timecode in the **TC In** field.

3. If you want to specify how long the graphic should be displayed, select the check box in front of the **TC Dur** field. Otherwise, the graphic will be displayed until the end of the edit.

   The default duration value is 4 sec. The value is set from Xedio Manager under **Softwares > Parameter Profiles > CleanEdit > Timeline > Tag Default Duration**.
4. (optional) Modify the duration for the graphic display in the **TC Dur** field.
5. The **OK** button will become available as soon as you have selected a logo or a graphic.

How to Insert a ORAD Graphic

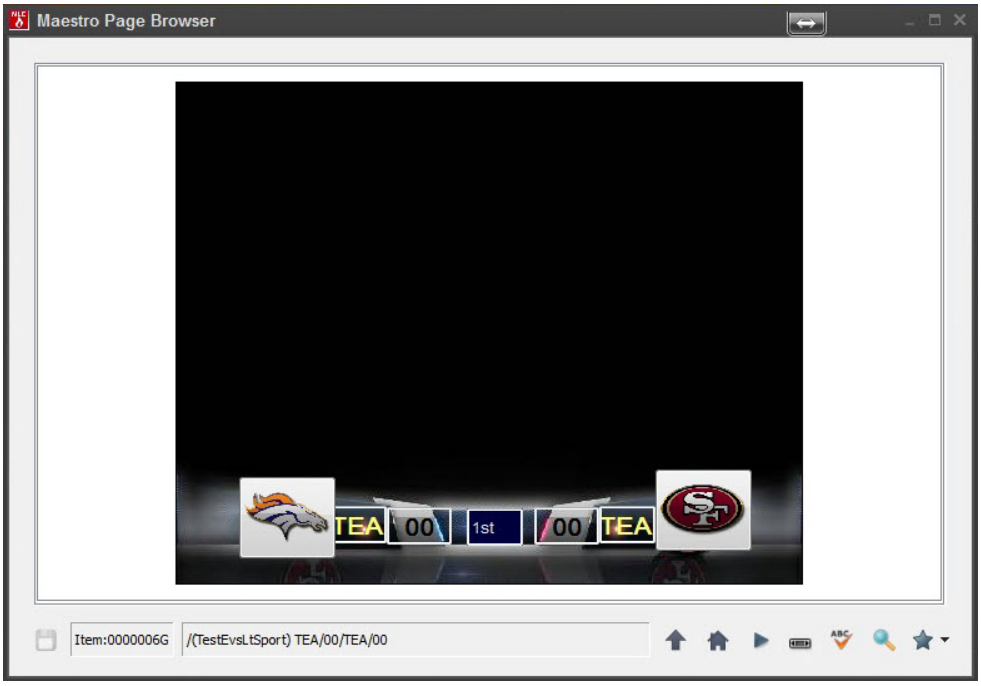
A ORAD graphic is inserted from the ORAD tab of the Tag Manager window.

To insert a ORAD graphic, proceed as follows:

1. Set a tag in the timeline as described in the above procedure "How to Set a Tag in the Timeline (Follow steps 1 to 4).

2. From the ORAD tab, click the **NLE** button .

   The Maestro Page Browser window opens:



3. Select an ORAD template.
4. (optional) edit the information displayed, for example to update scores.
5. Click to save.

   The ORAD graphic is displayed in the Tag Manager window:

   The jog bar allows browsing the effect.

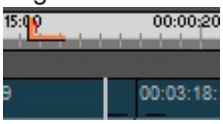
6. Click **OK** in the Tag Manager window.

The graphic animation can be previewed from the Recorder pane thanks to the key.

Tag Display

Tags are displayed on the Timecode bar with a number.

Tags created from the vizRT or ORAD tabs of the Tag Manager window are orange:



When tags are selected, the markers become purple.

A tooltip appears when moving the mouse over a tag marker.

11.2.6. Moving Tag Points

Possible Methods

You can move one or more tags in one of the following ways:

- by selecting the tag points on the Timecode bar and dragging the mouse to move the selected tag points.

  This method is less precise, but allows you to move several tags at the same time.

- by editing directly the position and the duration of a tag in the Tag Manager window.

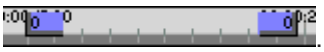
  This method is more precise, but only allows you to move one tag at a time.

How to Move the Tag Points in the Timeline Display

To move the tags points directly in the timeline display, proceed as follows:

1. Select the tag point(s) you want to move by clicking the tag marker on the Timecode bar.

   To select several tag points, keep the **CTRL** key pressed while clicking the tag markers. To deselect a tag point, click the tag marker again.

   The markers of the selected tags become purple:  .

2. Position the mouse over the selected tags, drag the selected tag point(s) to the requested position and release it/them.

   During the drag action, a rectangular shadow on the Timecode bar shows the new position of the selected tag which is the most on the left in the timeline:

How to Move the Tag Points in the Tag Manager Window

To move the tags points in the Tag Manager window, proceed as follows:

3. Right-click on the Timecode bar and select **Tag Properties** from the contextual menu. The Tag Manager window opens.
4. In the Tag Order group box, click the number of the tag you want to move.
5. In the Properties group box, modify the values of the **TC In** and/or **TC Dur** fields depending on the requested move.
6. Click **OK**.

11.2.7. Duplicating a Tag

Possible Actions

Tags used to insert a logo or a graphic in the timeline can be quickly duplicated somewhere else in the timeline.

Tags used by the Character Generator tool can be duplicated in the same way.

How to Duplicate a Tag

To duplicate a tag, proceed as follows:

1. Select the tag you want to duplicate by clicking one of the tag markers on the Timecode bar.

   The markers of the selected tags are highlighted in purple:
2. Place the nowline where you want the duplicated tag to be added.
3. Right-click the Timecode bar.
4. Select **Duplicate Tag** from the contextual menu.

The duplicated tag is added to the Timecode bar.

11.2.8. Deleting Tags

To delete a tag, proceed as follows:

1. Right-click on the Timecode bar and select **Tag Properties** from the contextual menu. The Tag Manager window opens.
2. In the Tag Order group box, click the number of the tag you want to delete.
3. Click **Delete**.
4. Click **OK**.

Warning
No warning message will be displayed to confirm the delete action, but you will still have the possibility to undo the action using the keyboard shortcut

11.3. Adding Integrated Text and Graphics or Subtitles

11.3.1. Introduction

Purpose

The Character Generator (CG) tool allows users to place text and/or graphics anywhere on the video image. Various text properties are available to set the text display. The combination of text and graphics can be saved as a template which can then be used later on.

The Character Generator tool can also be used to add subtitles to an edit. A saved template will be selected so its text properties will be applied to the subtitles.

This tool is available from the Text tab of CleanEdit.

Character Generator Process Overview

Integrated Text and Graphics

The text and graphics integration process includes the following steps:

1. "Defining the Area to Insert Text/Graphics" on page 211.
2. "Adding Text and Graphics to the Edit" on page 212.
3. "Saving a Template of Character Generator Page" on page 218.
4. "Applying a Transition Effect to the CG Area" on page 219.
5. "Checking the Integrated Text and Graphics" on page 219.
6. "Editing the Character Generator Page Properties" on page 223.

Subtitles Import

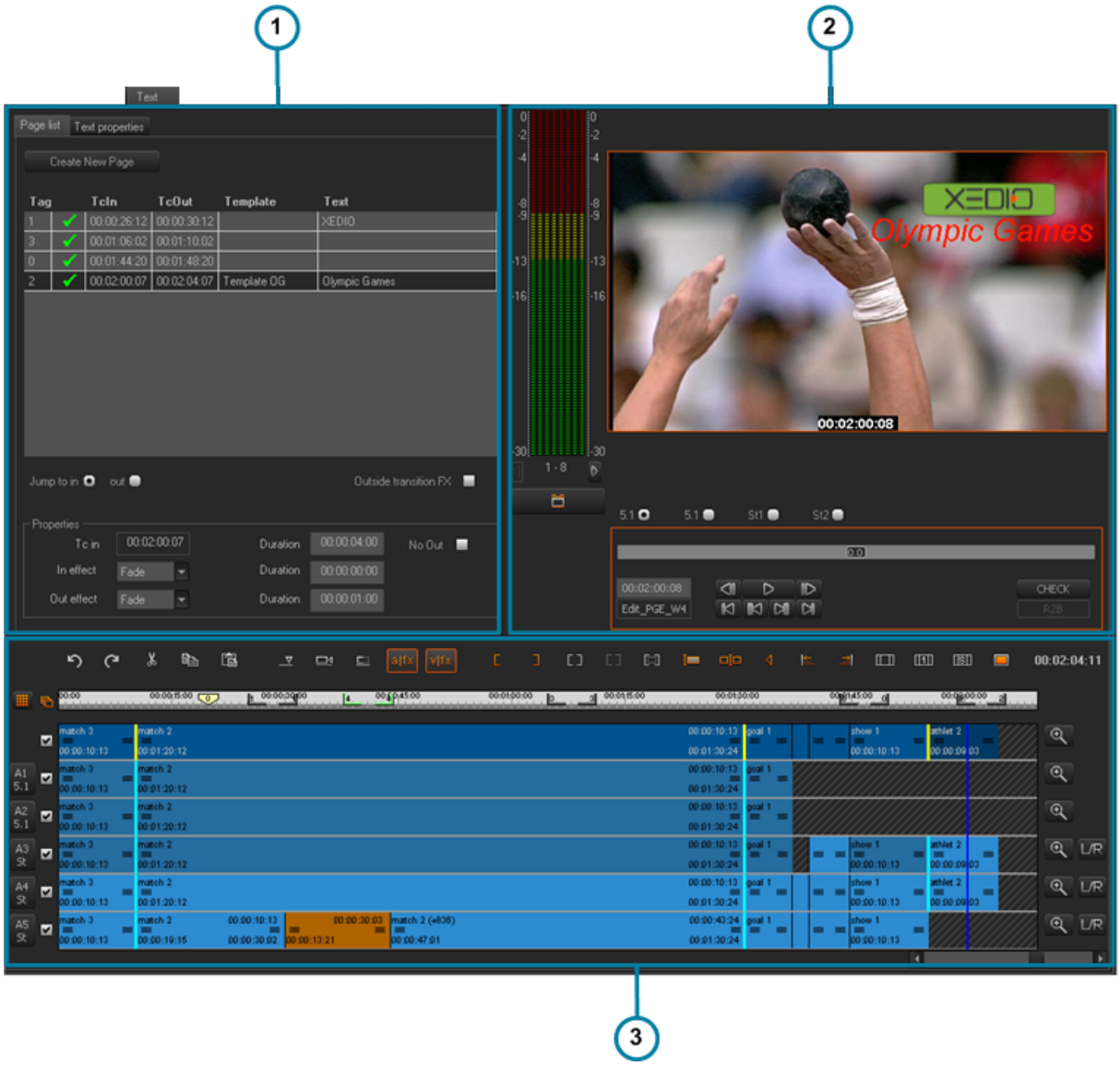
The addition of subtitles to an edit is described in the following steps:

1. "Saving a Template of Character Generator Page" on page 218.
2. "Importing a Subtitle File" on page 220.

11.3.2. Text Tab Overview

Illustration

The Text tab contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the Text tab:

Part	Name	Description
1.	Character Generator area	This pane is used to define the Character Generator (CG) tags and associate integrated text and graphics to them, or it can be used to import subtitles files into the edit.
2.	Player Pane	This pane is used to preview the edit and see the integrated text and graphics or the subtitles.
3.	Graphical Timeline	This area is a graphical representation of the edit. It shows the areas where integrated text and graphics or subtitles are added to the edit.

11.3.3. Defining the Area to Insert Text/Graphics

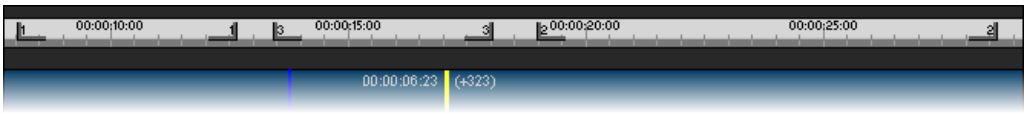
When an edit is loaded in the timeline, you will first have to define the area to insert text/graphics. This can be viewed like creating a Character Generator page.

You have the possibility to:

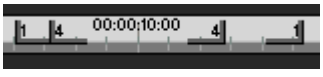
- Define the area from the nowline position for a default duration of 4 seconds: put the nowline at the required position and then click the **Create New Page** button.
- Define the area between a Mark IN and a Mark OUT: click the **Mark IN** and **Mark OUT** buttons and then the **Create New Page** button on the top of the Page List sub-tab.

The CG tags are listed in the Page List sub-tab:

They appear in the timecode bar above the timeline in the form of numbered gray tags.



Note
Nested areas can be defined.



11.3.4. Adding Text and Graphics to the Edit

Overview of the Text Properties Tab

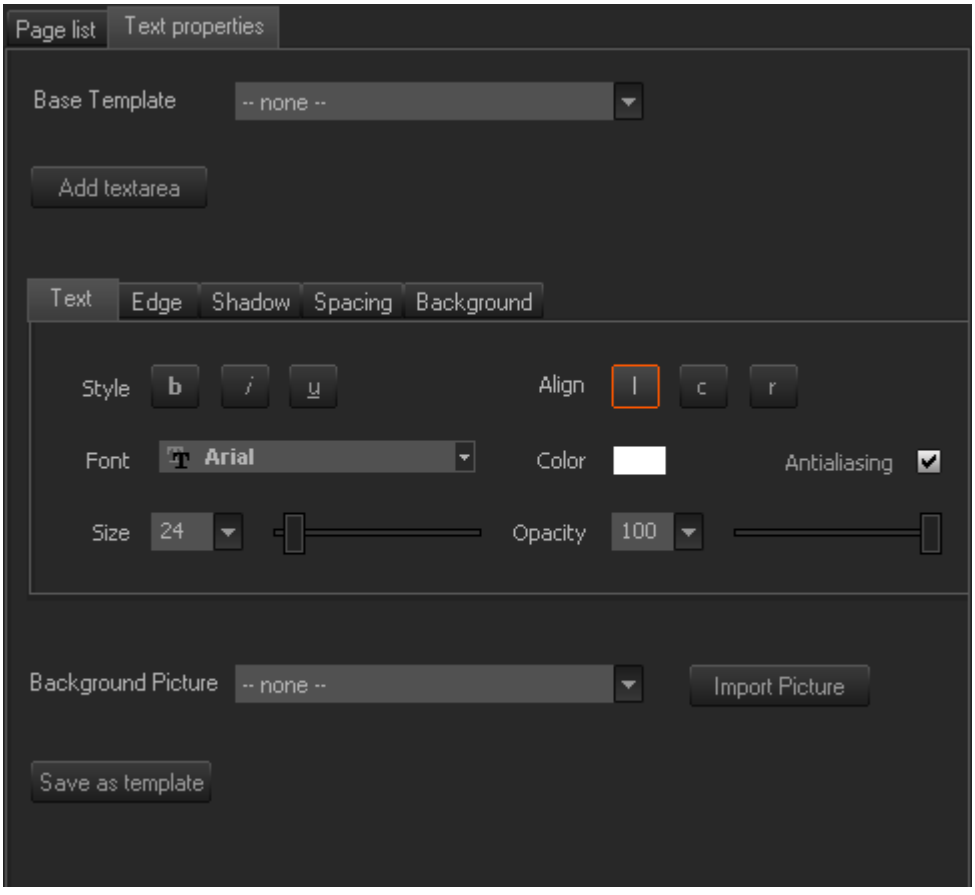
General Description

As soon as the **Create New Page** button has been clicked, the Text Properties tab is displayed allowing you to add text, add a picture, save a Character Generator template.

You have the possibility to:

- Use a pre-defined text & graphics template from the **Base Template** field. See section "Applying a Template" on page 219.
- Define new text and graphics as explained in next sections.

Illustration



Text Properties

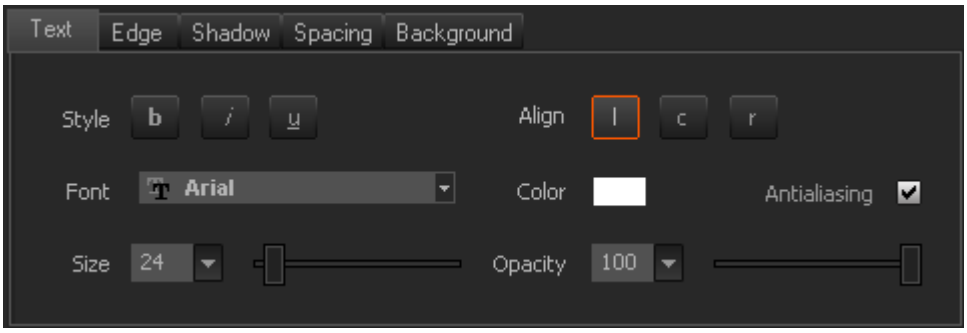
Five sub-tabs are available in the Text Properties tab to define the text properties.

If no text is selected, modified properties will be applied to all the text in the area.

If some text is selected, modified properties will be applied to the selection only.

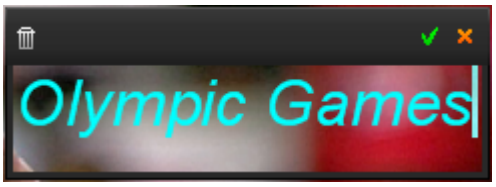
Text Sub-tab

The Text sub-tab provides options which define the properties of the text itself, such as style, alignment, font, color, size and opacity.



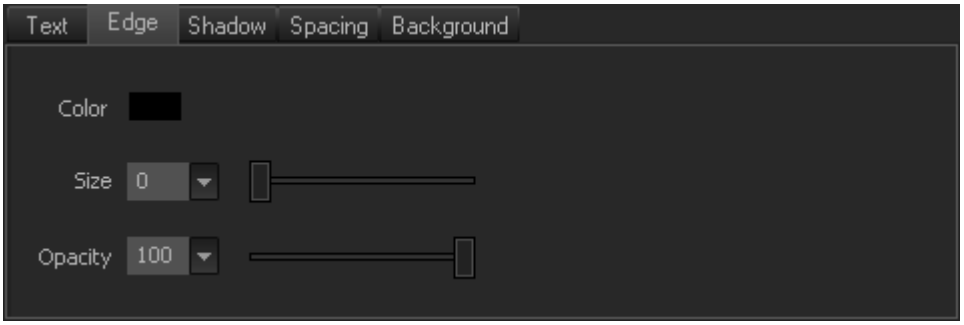
The antialiasing option is selected by default. This is used to minimize the distortion artifacts.

Example with italic, centered and turquoise options:



Edge Sub-tab

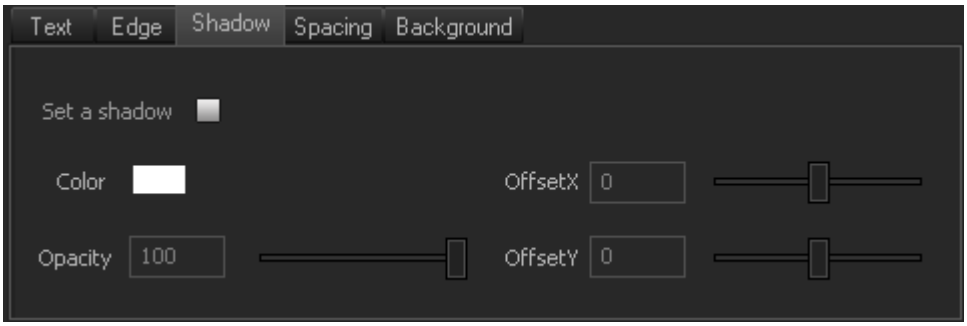
The Edge sub-tab is used when you want to add a border to the text.



Example with a blue edge of size 1 and 100% opacity:

Shadow Sub-tab

The Shadow sub-tab is used when you want to apply a shadow to the text.



To apply a shadow to the text, define the following settings:

- Select the **Set a Shadow** option.
- Choose a color for the shadow by clicking the Color box, selecting a color from the palette and then pressing the **OK** button.
- The OffsetX parameter defines the horizontal size of the shadow.
- The OffsetY parameter defines the vertical size of the shadow.

Example of a white shadow with Offsets of 5:

Spacing Sub-tab

The Spacing sub-tab defines the spacing between lines (Interline option) and between letters (Tracking).

Example with an interline of 1.5 and a tracking of 15:

Background Sub-tab

The Background sub-tab is used to apply a color background in the text area.

Example with a light orange background with 50% opacity:

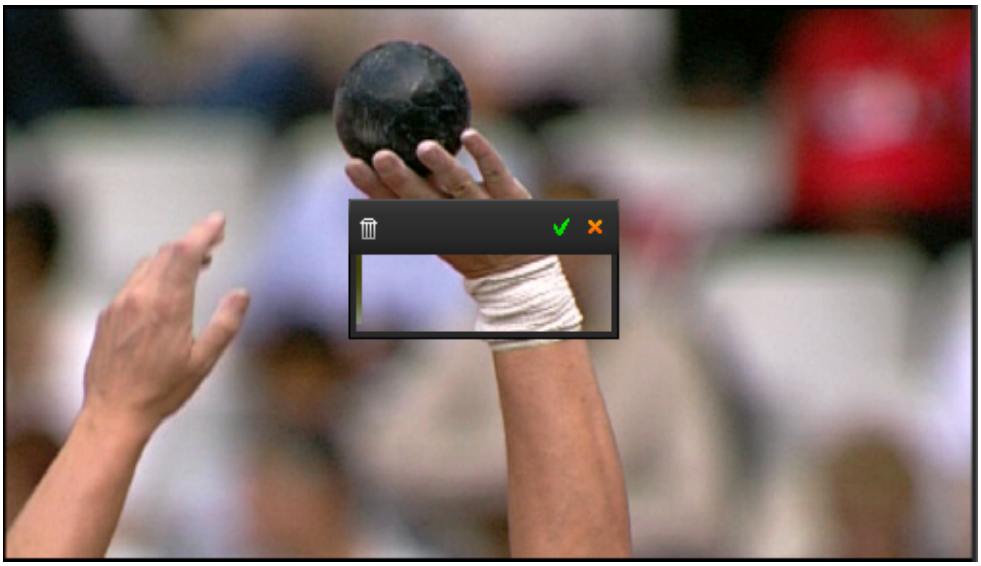
Adding Text and Defining Text Properties

How to Add Text

To enter text, proceed as follows:

1. Click the Add textarea button from the Text Properties tab.

   A text box appears in the Video Display:



2. Enter your text in the text box.
3. Define the text properties through the five sub-tabs of the Text Properties tab.
4. Click the button to validate your text.

Note
You can repeat steps 1 to 4 to associate several text areas to the same tag area. They will then be displayed next to the same tag number in the tag list.

Possible Actions on the Text Area

You can move or resize the text area by dragging the area to the desired position and dragging the edges to increase the box size.

The following buttons are present on the text area:

Button	Description
	Deletes the text area.
	Validates the text and its properties. The text area is then surrounded by a thin black line to identify it.

Button	Description
	Cancels the editing performed since the last Validate action.

Adding Graphics

Prerequisite

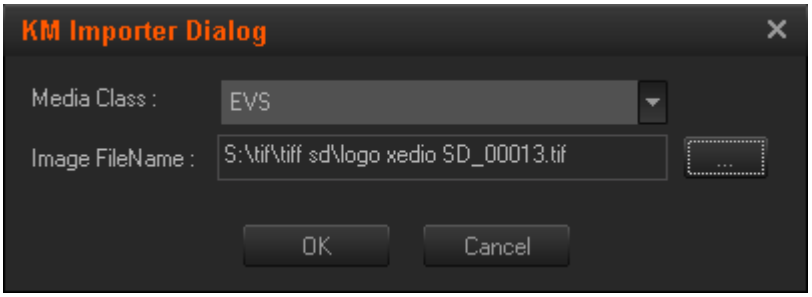
Provided that the **Enable Import Picture** option has been enabled in Xedio Manager (Software > Parameter Profiles > CleanEdit > Cg), an **Import Picture** button is displayed at the bottom of the Text Properties tab.

How to Add Graphics

1. Click the

button.

   The KM Importer Dialog bow opens:



2. Click the **Browse** button to select the picture file (.tif) to import.
3. Associate a Media Class to the picture from the **Media Class** field
4. Click **OK**.

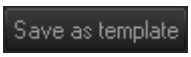
The picture is added to the Video Display:

Note that the picture cannot be moved or resized once imported.

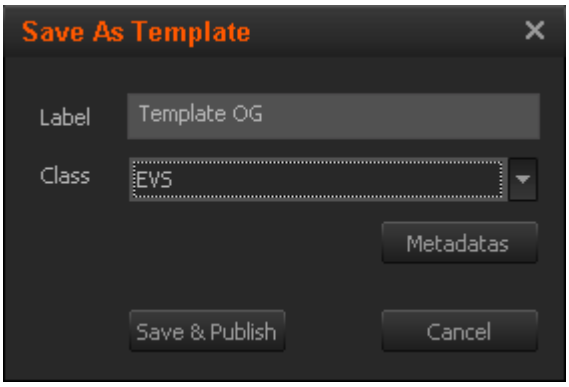
11.3.5. Working with Template of Text and Graphics

Saving a Template of Character Generator Page

To save a template, proceed as follows:

1. Click the  button

   The Save As Template dialog box opens



2. Enter a Name in the **Label** field.
3. Associate a Class to the template from the **Class** field.
4. (optional) assign Metadata from the **Metadata** button.
5. Click the **Save & Publish** button.

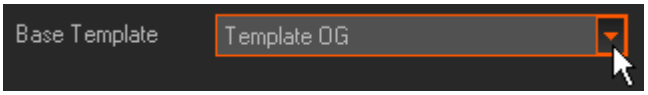
The template name is available from the Base Template list in the Text Properties tab.

Templates are stored in the database and are listed in the Media Manager, under the CG template category.

Applying a Template

Text & graphics template are also called CG templates (for Character Generator). CG templates which have been previously saved or imported can be easily applied to a Character Generator page being created.

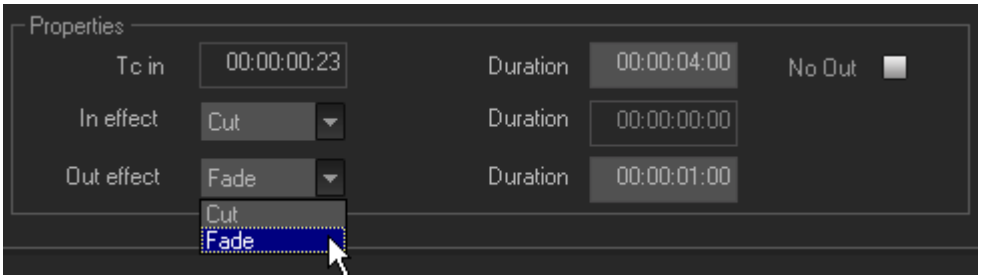
To do so, select it from the Base Template list in the Text Properties tab:



Text and graphics are then automatically applied to the page.

11.3.6. Applying a Transition Effect to the CG Area

During playout, the text and graphics can appear and/or disappear without transition or with a Fade transition effect. This is defined from the Page List tab.



To define the effect for the IN point of the CG area, select it in the **In effect** field from the Properties group box.

To define the effect for the OUT point of the CG area, select it in the **Out effect** field from the Properties group box.

With a Fade effect, you will have to set its duration in the corresponding **Duration** field.

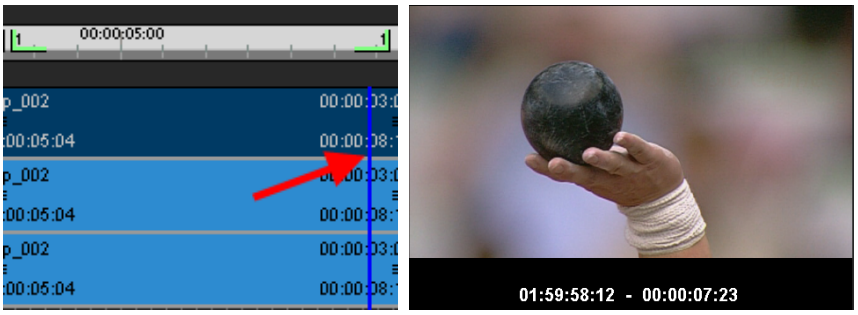
11.3.7. Checking the Integrated Text and Graphics

You can check the result of the text and graphics integration by playing the edit from the Player area.

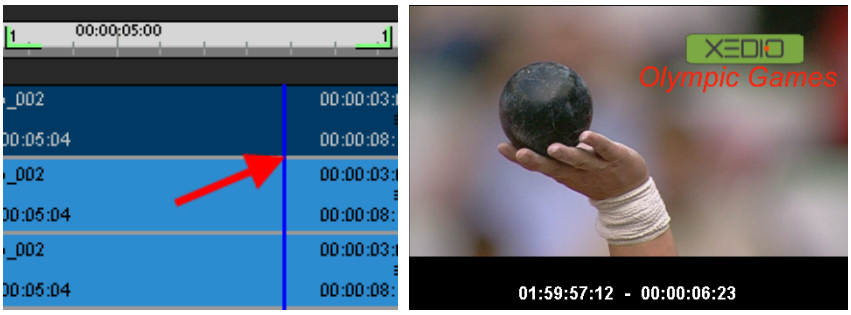
To place the nowline on a specific tag, select it in the tag list from the Page List tab and select the **Jump to in** or the **Jump to out** radio button. This will place the nowline on the first frame or on the last frame of the tag area.

When a fade effect is defined, selecting the **Outside transition FX** option will place the nowline within the tag area, on the first frame after the In effect (jump to in) or before the Out effect (jump to out).

Example: Jump to Out without the Outside transition FX option



Example: Jump to Out with the Outside transition FX option



11.3.8. Importing a Subtitle File

Introduction

Subtitles files can be imported into CleanEdit and associated to an edit from the Character Generator tool (Text tab).

The file must contain the information of the start timecode (TC IN) and the end timecode (TC OUT) of each subtitle sentence and the subtitle text. An empty line must be inserted between each set of subtitle information. Such a subtitle set is considered as a CG tag in CleanEdit.

The first timeline frame is considered to be at timecode 00:00:00:00. So, TC IN and TC OUT of each subtitle is calculated relatively from this timeline start timecode.

Supported File Format and Example

The supported file format must be UTF-8 coded and in the form of:

TC IN - TC OUT `CRLF`
Text line 1 `CRLF`
Text line 2 `CRLF`
`CRLF`

The Subtitle Edit software can be used to generate files in a format supported by CleanEdit.

Here is an example of the way subtitles must be written in the file:

00:28:41:17 - 00:28:45:09
Subtitle 1 Sentence 1
Subtitle 1 Sentence 2
[empty line]

00:28:45:13 - 00:28:48:06
Subtitle 2 Sentence 1
Subtitle 2 Sentence 2
[empty line]

00:28:48:10 - 00:28:50:20
Subtitle 3 Sentence 1
Subtitle 3 Sentence 2
[empty line]

00:28:50:24 - 00:28:53:06
Subtitle 4 Sentence 1
Subtitle 4 Sentence 2

Prerequisites

- The **Enable Subtitle File Import** setting must have been selected in Xedio Manager (Softwares > Parameter Profiles > CleanEdit > Cg) for the **Import Subtitle File** button to be displayed.
- A template of text properties (font, style, ...) must have been defined as described in section "Saving a Template of Character Generator Page" on page 218.

Limitations and Constraints

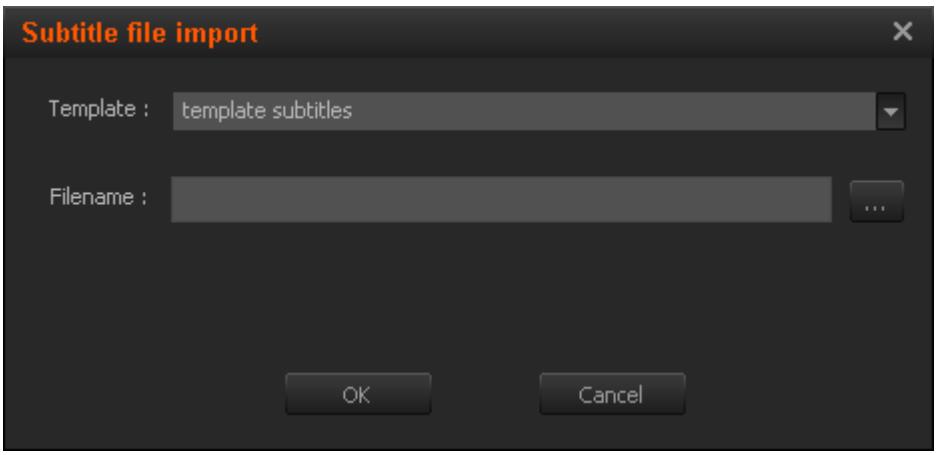
- It is not possible to use any other CleanEdit function during the file import.
- No check, such as edit check, should be performed during the import.
- No update of timeline or list and no backup should be performed during the import.
- The subtitle file import cannot be undone with the Undo function.

How to Import a Subtitle File

To import a subtitle file into an edit, proceed as follows:

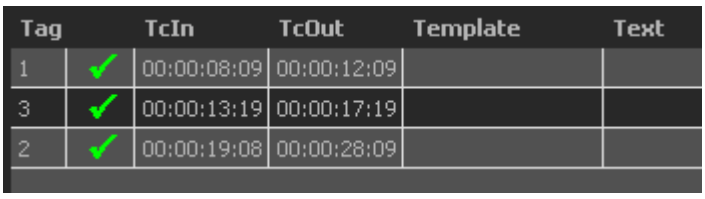
1. On the Page List sub-tab of the Text tab, click the **Import Subtitle File** button.

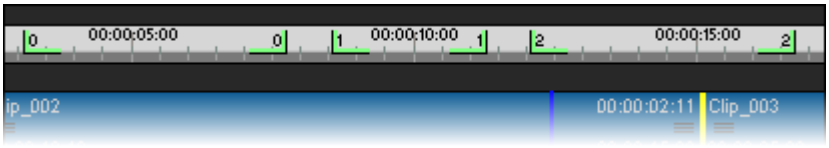
   The Subtitle File Import window opens:



2. Select a template of text properties in the **Template** field.
3. Click the **Browse** button next to the **Filename** field to select the subtitles file.
4. Click **OK**.

Each subtitle set is displayed as CG tags in the Page List sub-tab and in the timecode bar above the timeline.





Checking the Imported Subtitles in the Edit

You can check the result of the subtitles integration by playing the edit from the Player area.

11.3.9. Editing the Character Generator Page Properties

Editing Area Duration

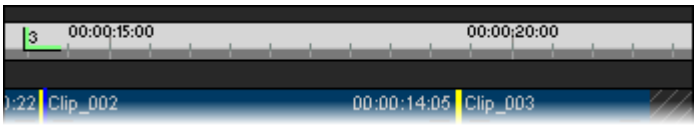
How to Edit a Tag Area Duration

1. Select the tag in the tag list from the Page List tab
2. Modify the duration in the **Duration** field from the Properties group box
3. Press **ENTER**.

How to Remove the Mark OUT of a Tag

1. Select the tag in the tag list from the Page List tab
2. Select the **No Out** option

The corresponding text and graphics will then be applied until the end of the edit.



Editing Page Properties

How to Edit the Properties of the Text Area

1. Double-click the selected tag in the tag list from the Page List tab

   The Text Properties tab opens. Text area(s) related to the current tag are surrounded with a thin black line.

2. Double-click in the text area.
3. Modify the required properties.
4. Click the button.

How to Modify the Selected Picture

- Browse for a new picture from the **Import Picture** button

OR

- Select **None** from the **Background Picture** field to un-assign picture.

Possible Actions from the Page List Tab

When you right-click a tag line in the Tag List from the Page List tab, the following contextual menu is displayed:

Menu Item	Meaning
Enable	Enables the selected tag if it has previously been disabled. A is displayed next to the tag number in the tag list.
Disable	Disables the selected tag area, so it will not be displayed during edit playout. A is displayed next to the tag number in the tag list.
Duplicate	Duplicates the selected tag area and places the new tag area just after the selected one.
Delete	Deletes the selected tag area.

Note
CG tags can be quickly duplicated somewhere else in the timeline, like a tag. See section "Duplicating a Tag" on page 208.

12. Header Maker

12.1. Introduction

The Header Maker tab provides a tool to insert a still clip at the beginning of an edit. This still is created automatically and is based on information defined in a XML file. Besides this predefined information, you can also enter custom information (like feed, location, source, audio) in the Data editing area.

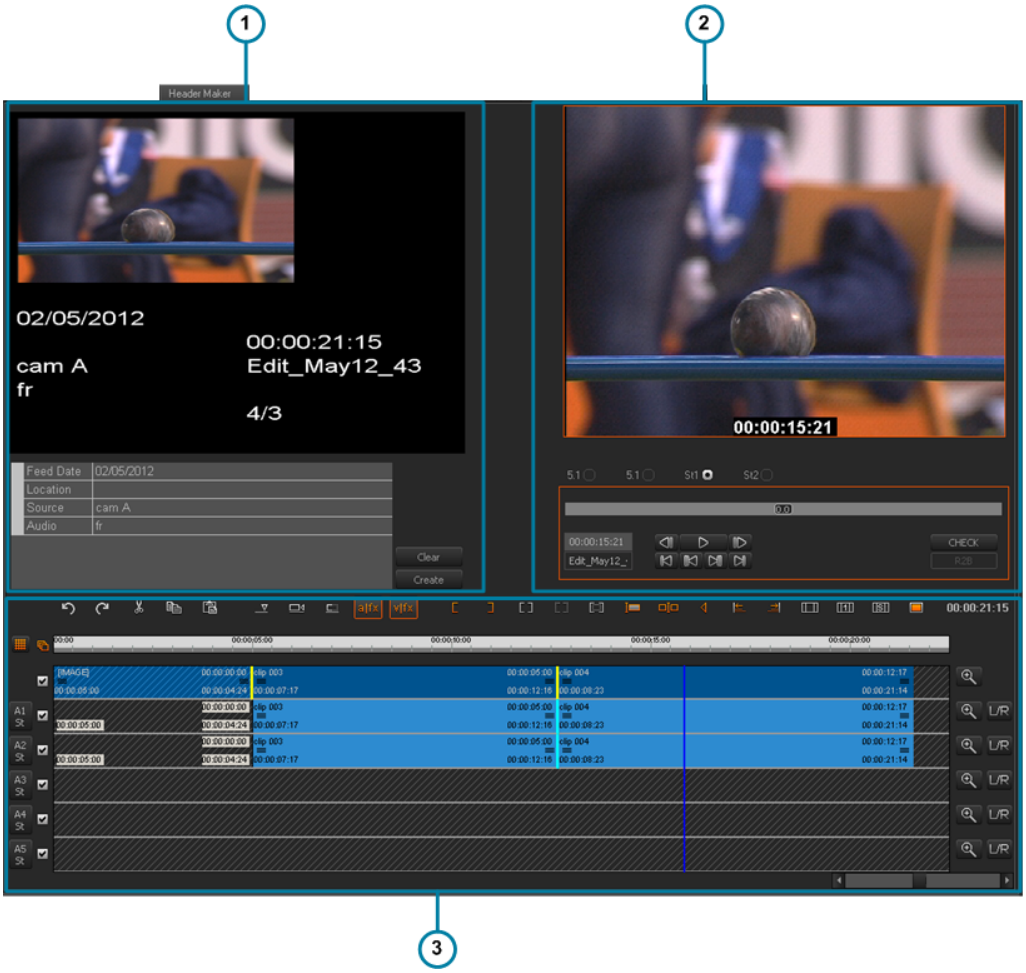
A specific (editable) profile describes the way in which the still clip has to be generated (components and positions) as well as its length in the timeline.

The Header Maker tool supports 4:3 and 16:9 edits and takes care of the video aspect ratio.

12.2. Header Maker Tab Overview

Illustration

The Header Maker tab contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the Header Maker tab:

Part	Name	Description
1.	Header Preview Area	This pane also contains a data editing area.
2.	Recorder Area	This pane is used to browse the loaded media and select an image.
3.	Timeline Area	This area contains the edit to which a still is added.

The Recorder area and the Timeline area are similar to the ones on the Edit tab.

12.3. Operations

To manually enter data in the dedicated fields in the Data Editing area, select the field and type the value or select a value from the drop-down list. If you want to remove the values from these fields, click on the **Clear** button.

By clicking on the **Create** button you create the still clip at the beginning of the edit.

On this still clip you can perform a couple of operations, as you would do on any other clip in the timeline, such as:

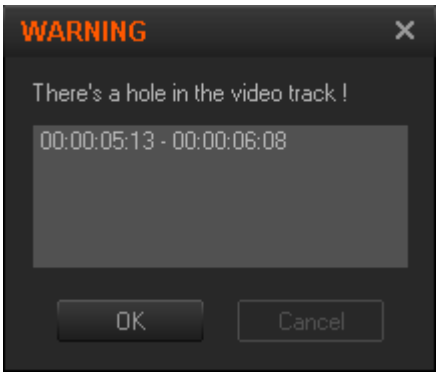
- Enlarging the clip,
- Reducing the clip,
- Moving the clip,
- Deleting the clip,
- Applying video clip effects,
- Adding video transitions between the still clip and an adjacent one.

13. Final Stages in the Editing Process

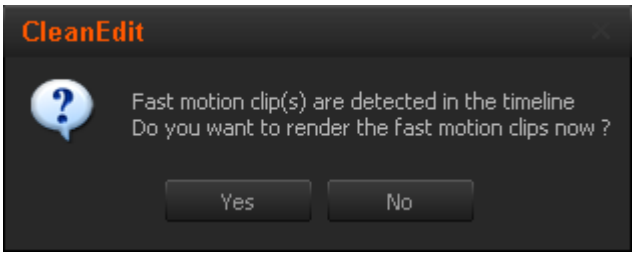
13.1. Checking the Edit

When the edit is completed it is possible to check it. Xedio CleanEdit parses the timeline for possible errors (lack of video, for example).

If a hole is discovered a dialog box opens and gives a time reference on the timeline for where there is no video.



If a fast motion clip is detected a dialog box opens via which you can render the fast motion clip(s).



If you choose **No**:

- The **Check** button remains enabled, since not-rendered fast motion clips are still present in the edit.
- The **R2B** (ready to broadcast) button remains disabled.

If the edit is checked successfully, the **Check** button will be disabled and the R2B (ready to broadcast) button will be enabled.

See section "Checking the Edit" on page 22 for more information.

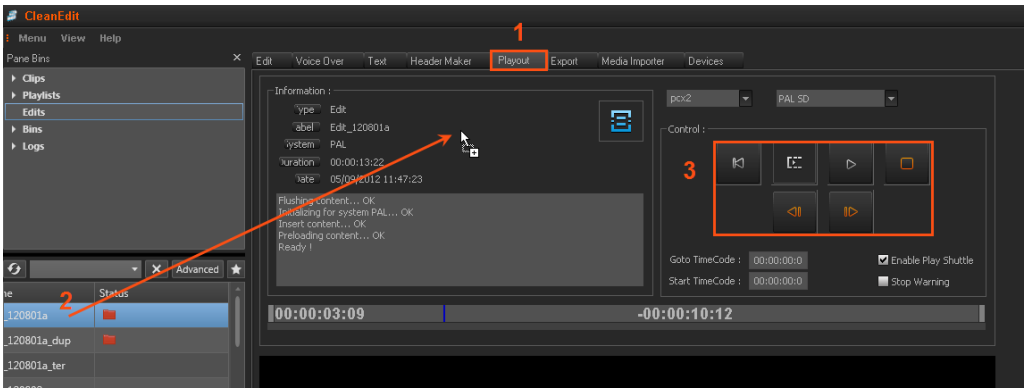
13.2. Playing Out an Edit

13.2.1. Introduction

You can play out an edit or a clip individually via the Playout tab. A Protect Media clip or an Associated clip can also be played out if it exists as a file. A log not covered to a clip cannot be played out.

Note
The playout option is available only on workstations equipped with an EVS SDI output board (PCX2 or PCX3).

13.2.2. Playout Process from the Playout Tab



1. **Activating the Playout tab:**

   Move the mouse pointer over the Playout tab

2. **Preloading the edit:**

   You can play an edit whether it is ready to broadcast or not.

   To preload the edit for the playout, select the edit from the Elements grid and drag it anywhere onto the Playout tab work area.

   The edit is ready to be played out.

3. **Playing the edit:**

   To play the edit, you can directly use the usual control commands available on the right part of the window.

   See section "Playout Tab" on page 230 for more information on the Playout tab.

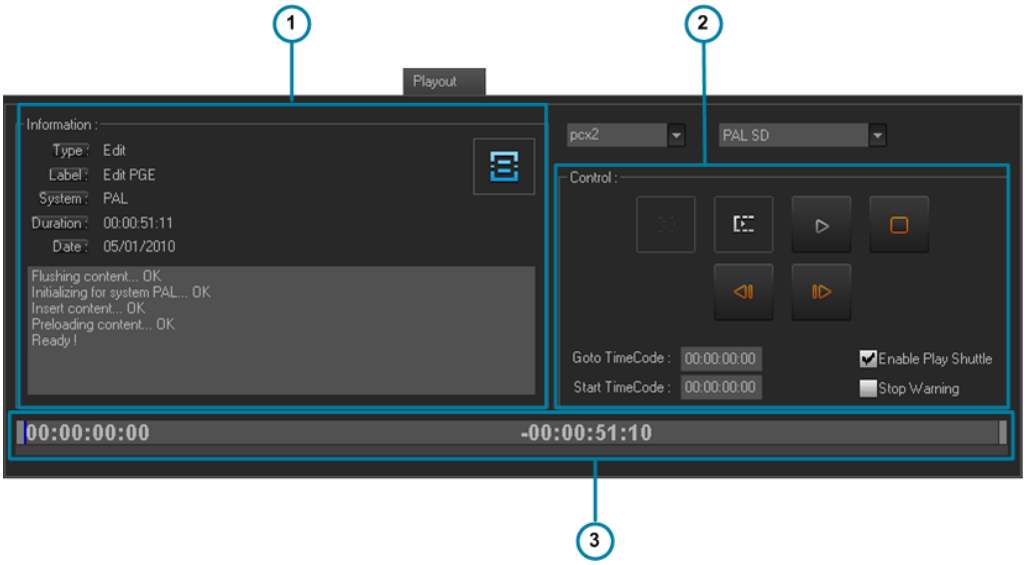
For each clip that is part of the edit, if the corresponding high resolution media file is missing, the system will access the corresponding proxy file. The proxy image will automatically be resized to match the high resolution and the proxy file will be processed as the high resolution file would be, regarding the effects, overlapping graphic layers and transitions.

13.2.3. Playout Tab

Overview

Illustration

The Playout tab contains the areas highlighted on the screenshot below:



Area Description

The table below refers to the sections where the various parts of the Playout tab are detailed:

Part	Name	Description
1.	Information Zone	See section "Information Zone" on page 230.
2.	Control Zone	See section "Control Zone" on page 231.
3.	Media Bar	See section "Media Bar" on page 232.

Information Zone

The information zone displays general details of the edit (like type, label, system, duration, date).

The text field below this general information shows a log confirming when the edit was loaded correctly and is ready for playout.

Control Zone

The buttons in the control zone allow you to:

Go to the beginning of the edit

Preload the edit

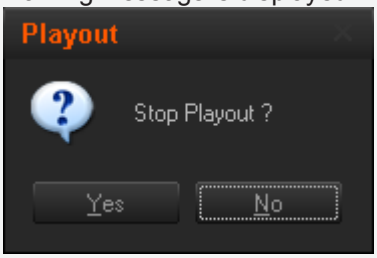
Play the edit

Stop the edit

Go to the previous frame

Go to the next frame

The following functions are available:

Item	Description
Goto Timecode	Entering a timecode value in this field allows to jump to this specific timecode.
Start Timecode	Entering a timecode value in this field allows the edit to be played out from this specific timecode.
Enable Play Shuttle	When this option is selected, the Play function can be activated from the Shuttle Pro.
Stop Warning	If this option is selected when you click **Play** and then **Stop**, a warning message is displayed: 

Media Bar

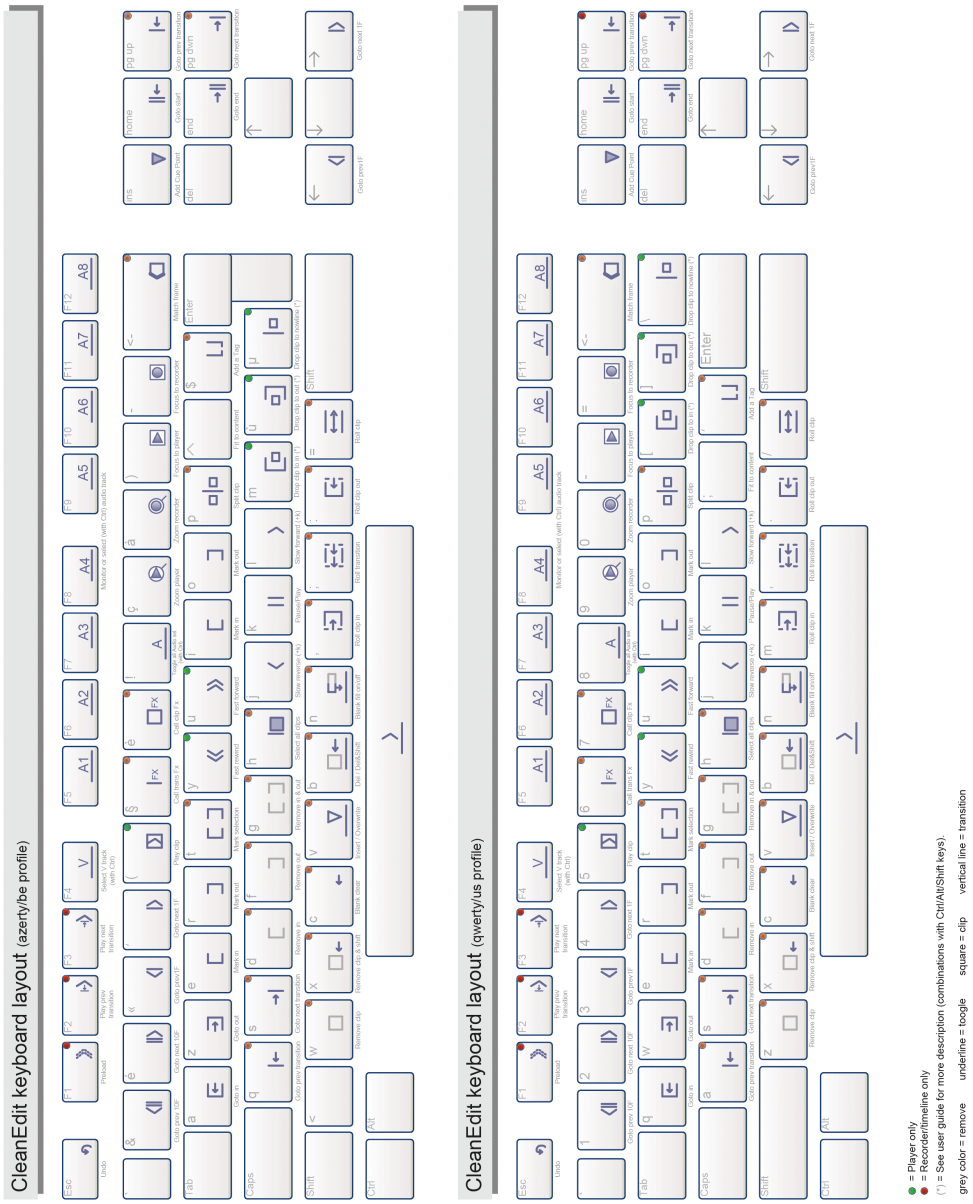
The video will be visible on the SDI output of Xedio CleanEdit.

The Media Bar displays the following information:

- a progress indicator (blue vertical line), which shows the current playout position.
- On the left, the time elapsed from the beginning of the edit up to the current playout position.
- On the right, the duration from the current position until the end of the playout.

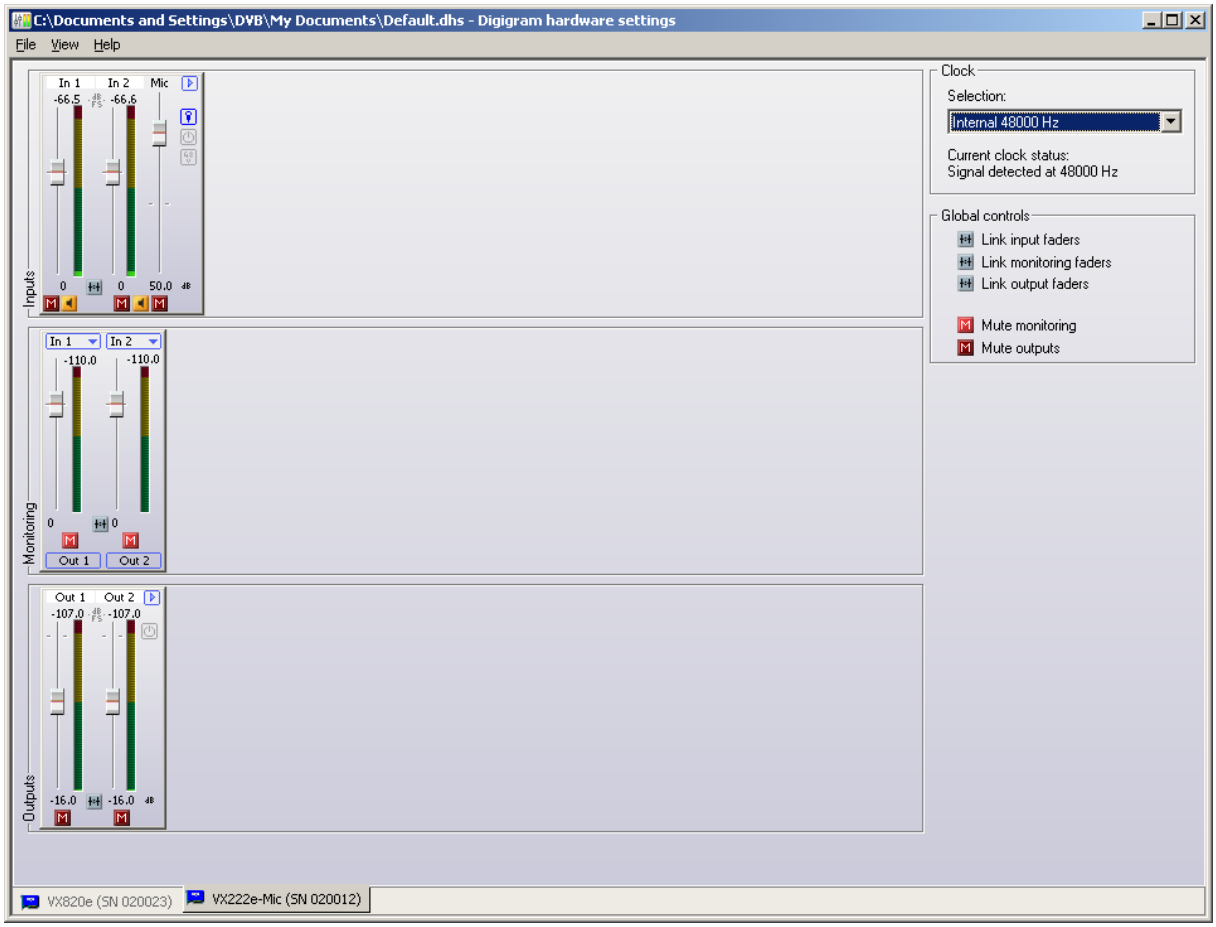
14. Appendix 1 – ShuttlePRO

15. Appendix 2 – Keyboard Shortcuts

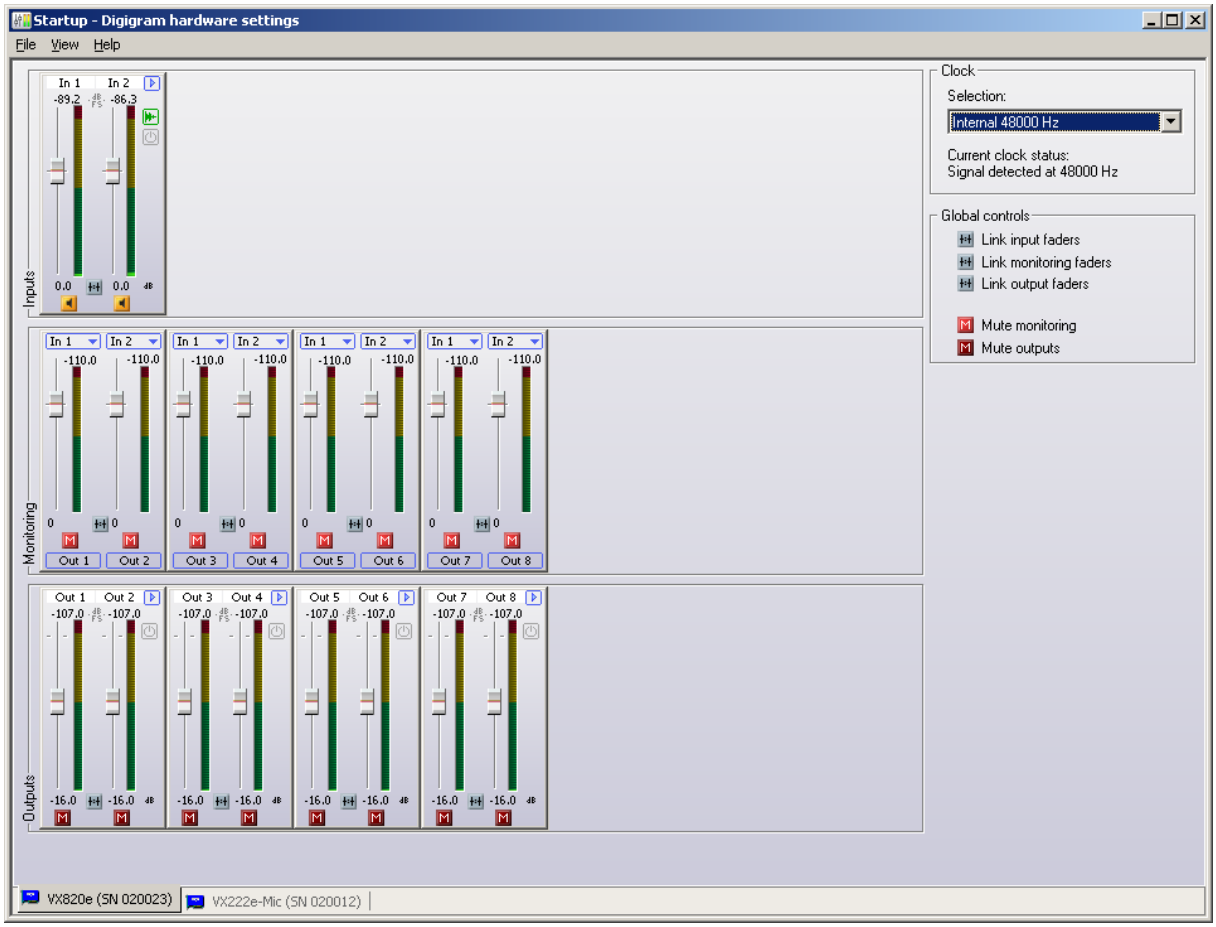

CleanEdit keyboard layout (azerty/be profile)
CleanEdit keyboard layout (qwerty/us profile)
= Player only
= Recorder/timeline only
(*) = See user guide for more description (combinations with Ctrl/Alt/Shift keys).
grey color = remove underline = toogle square = clip vertical line = transition

16. Appendix 3 – Digigram Hardware Settings

Settings for a Stereo Board



Settings for a 5.1 Board



Corporate
+32 4 361 7000

North & Latin America
+1 973 575 7811

EVS Headquarters
Liège Science Park
13, rue Bois St Jean
B-4102 Seraing
Belgium

Asia & Pacific
+852 2914 2501

Other regional offices
www.evs.com/contact

To learn more about EVS go to **www.evs.com**

EVS Broadcast Equipment is continuously adapting and improving its products in accordance with the ever changing requirements of the Broadcast Industry.
The data contained herein is therefore subject to change without prior notice. Companies and product names are trademarks or registered trademarks of their respective companies.